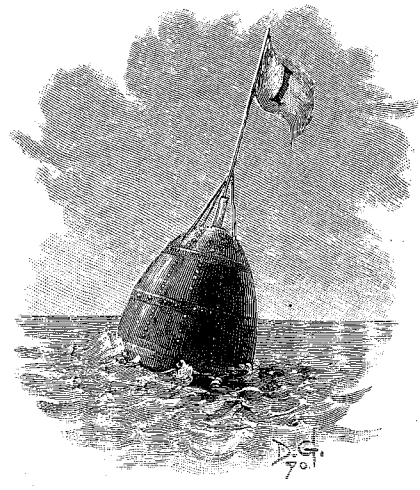
SCRIBNER'S MAGAZINE.

VOL. VIII. OCTOBER, 1890. No. 4.

WITH A CABLE EXPEDITION.

By Herbert Laws Webb.

IN these days of rapid development in new fields of electrical science and their commercial application, it is easy to overlook the magnitude of the work accomplished in the laying of deep-sea cables. According to the latest report of the International Bureau of Telegraph Administrations, the submarine telegraph system of the world consists of 120,070 nautical miles of cable. Government administrations own 12,524 miles, while 107,546 are the property of private companies. The total cost of these cables is in the neighborhood of two hundred million dollars. The largest owner of submarine cables is the Eastern Telegraph Company, whose system covers the ground from England to India, and comprises 21,860 miles of cable. The Eastern Extension, which exploits the far East, has 12,958 miles more. Early in last year the system of West African cables, which started from Cadiz only six years ago, was completed to Cape Town, so that the dark continent is now completely encircled by submarine telegraph, touching at numerous points along the coast. More than 17,000 miles of cable have been required to do this, and several companies, with more or less aid from the British, French, Spanish, and Portuguese governments, have participated in carrying out the work.



The North Atlantic is spanned by no less than eleven cables, all laid since 1870, though I think not all are working at the present time; five companies are engaged in forwarding telegrams between North America and Europe, and the total length of the cables owned by them, including coast connections, is over 30,000 nautical miles.

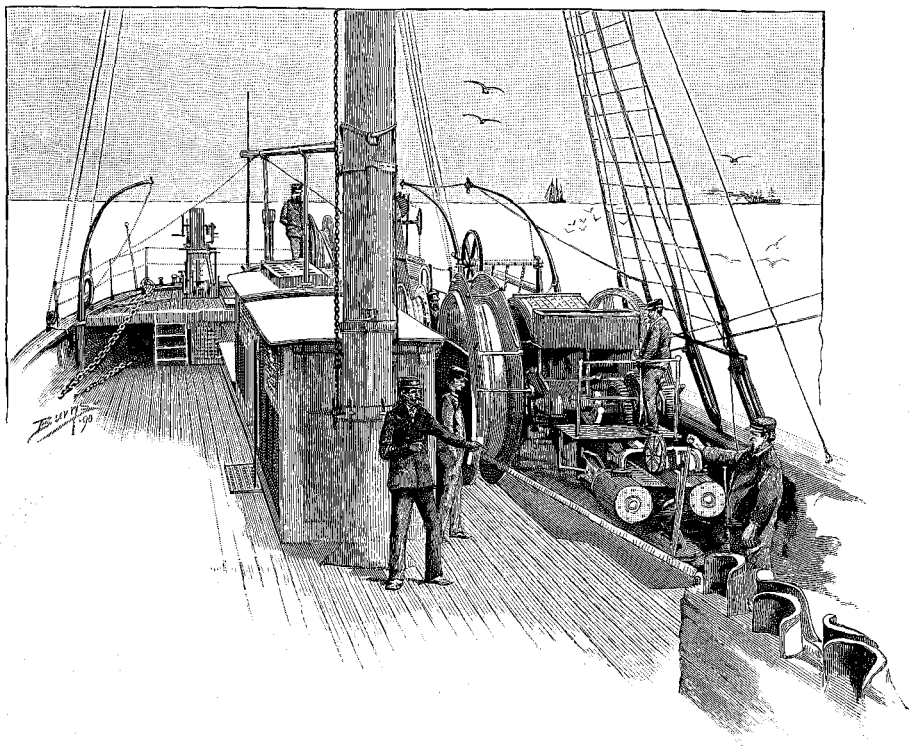
The cable fleet of the world numbers thirty-seven vessels, of an aggregate gross tonnage of about 54,600 tons. Ten ships belong to the construction companies, their aggregate gross tonnage being about half that of the entire fleet; the other twenty-seven are repairing steamers belonging to the different government and telegraph companies; they are stationed in ports all over the world, keeping a watchful eye on the condition of its submarine nerves, and doctoring them up whenever they need attention. The Silvertown and the Faraday head the list of cable ships in point of

Copyright, 1890, by Charles Scribner's Sons. All rights reserved.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

size, the former being 4,935 tons, and the latter 4,916 tons; while the Scotia (an old Cunarder) is a close third with 4,667. The Faraday has laid several of the Atlantic cables, and the Silvertown has done a great deal of work on many ramifications of submarine cables which radiate from the Newfoundland and Canadian coasts in working order.

The life on one of these cable-vessels is unique and most interesting, combin-



Paying Out Gear. From Chart House.

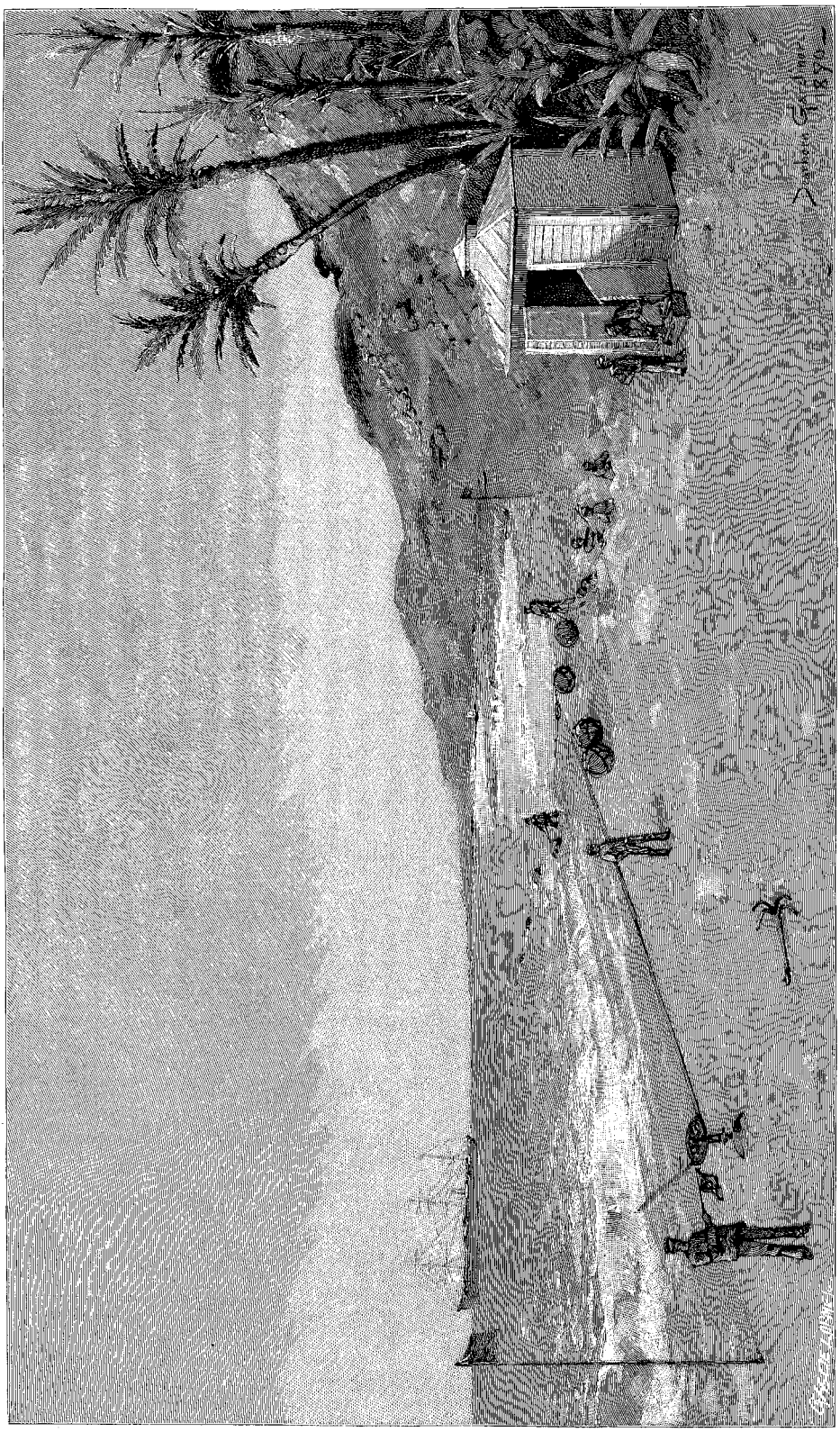
both coasts of South America and on the west coast of Africa. This ship has exceptional capacity for carrying cable, her main tank being fifty-three feet in diameter and thirty feet deep, large enough to stow a good-sized house in. On one expedition she carried 2,370 knots of cable, weighing 4,881 tons, the whole length being coiled on board in 22 days, or at the rate of over 100 knots a day. Better still, she laid the whole length without a single hitch, much of it being paid out at the high speed of nine knots an hour.

Among the repairing ships the best known is the Minia, the Anglo-American Telegraph Company's steamer, which patrols the North Atlantic, keeping the

ing the adventures of voyaging with operations demanding the highest scientific skill and knowledge, and with the most ingenious mechanical work. The men brought together are, of course, of widely varied experience and accomplishments, each in his way an expert in some branch of electrical or mechanical engineering. It was the writer's good fortune, in 1883, to be connected with the technical staff of such a vessel — the cable-ship Dalmatia — and he hopes that this narrative of his experiences will give a pleasant insight into the work of constructing the costliest and most wonderful half of Puck's girdle round the world.

In the summer of that year the Span-

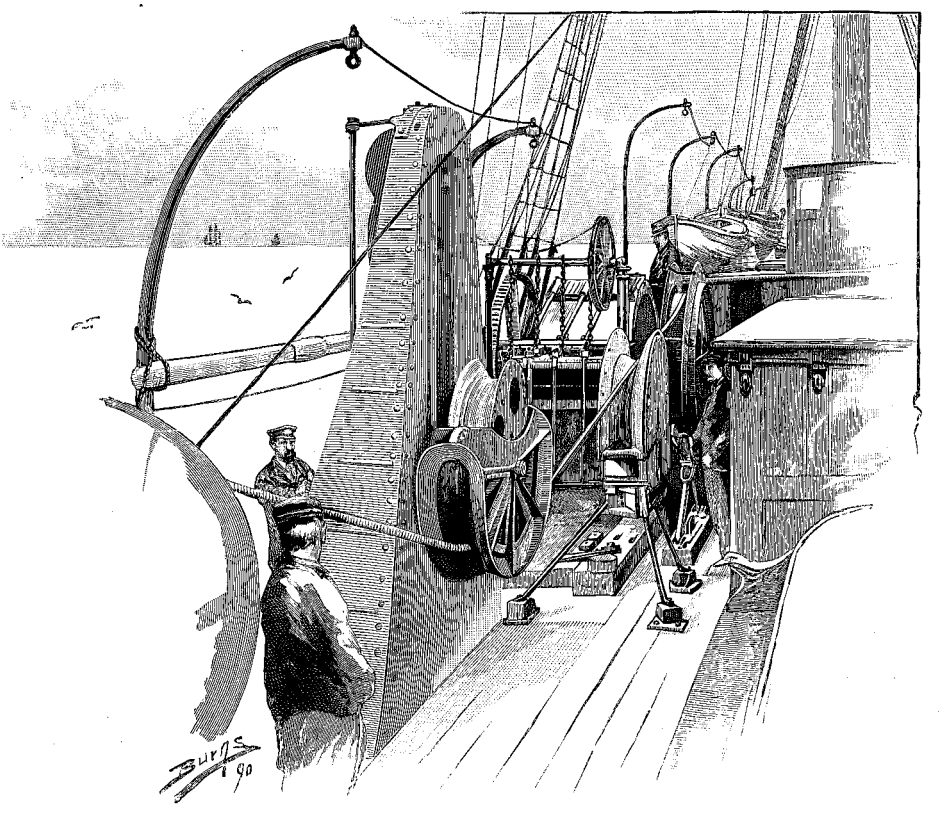
PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Landing the Shore End.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ish Government decided to establish telegraphic communication between the group of Atlantic islands known as the Canary Islands, and the Spanish Peninsula, by means of a submarine cable, and also to connect various of the principal islands of the group with each other by the same method. This important work was intrusted to a leading English cable manufacturing company with a very long name, commonly called for short, "The Argentville Company," from the name of the place where the company's works are situated. It was for the purpose of laying these cables that the Dalmatia and Cosmopolitan made the voyage which I shall describe.

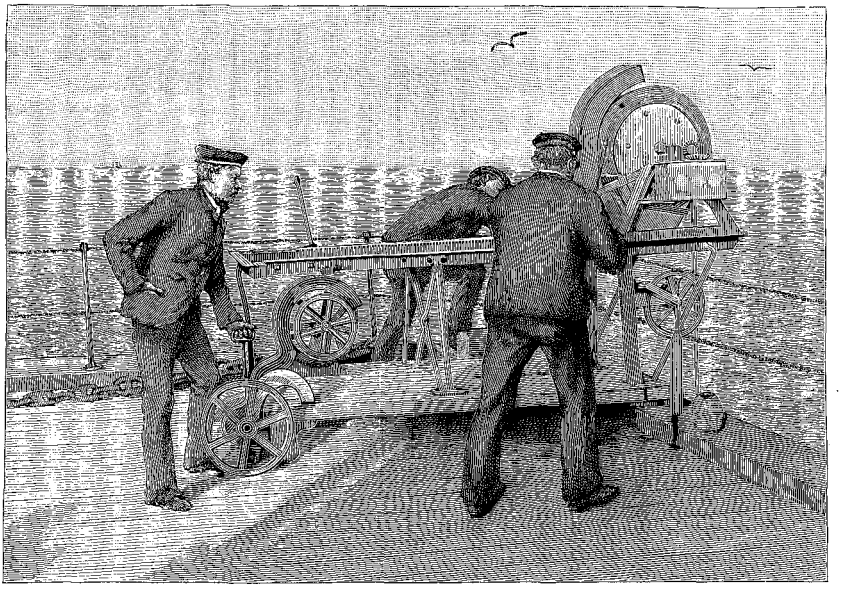


Paying Out Gear. From Stern Baulks.

Let us first see what a submarine cable is, and how it is made. To do this a visit must be made to the enormous factory on the banks of the Thames, a few miles below London. Here the birth of the cable may be traced through shop after shop, machine after machine. The foundation of all is the conductor, a strand of seven fine copper wires. This slender copper cord is first hauled through a mass of sticky, black compound, which causes the thin coating of gutta-percha applied by the next machine to adhere to it perfectly, and prevents the retention of any bubbles of air in the interstices between the strands, or between the conductor and the gutta-percha envelope. One envelope is not sufficient, however, but the full thickness of insulating material has to be attained by four more alternate coatings of sticky compound and plastic gutta-percha. The conductor is now insulated, and has developed into "core." Before going any further the core is coiled into

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tanks filled with water, and tested in order to ascertain whether it is electrically perfect, *i.e.*, that there is no undue leakage of electricity through the gutta-percha insulating envelope.



Sounding Machine.

These tests are made from the testing-room, replete with beautiful and elaborate apparatus,* by which measurements finer and more accurate than those even of the most delicate chemical balance may be made. Every foot of core is tested with these instruments, both before and after being made up into cable, and careful records are preserved of the results.

After the core has been all tested and passed, the manufacture of the cable goes on. The core travels through another set of machines, which first wrap it with a thick serving of tarred jute, and then with a compact armoring of iron or steel wires, of varying thickness according to the depth of water in which the cable is intended to be laid. Above the armoring, in order to preserve the iron from rust as long as possible, is applied a covering of stout canvas tape thoroughly impregnated with a pitch-like compound, and sometimes the iron wires composing the armor are separately covered with Russian hemp as an additional preservative against corrosion.

The completed cable is coiled into large circular store-tanks, where it is kept for some time submerged in water and again subjected to an exhaustive series of electrical tests. These tests form, so to speak, the baptismal record of the cable ; by them it is ascertained whether the specifications have been complied with in respect to the maximum conductor resistance and the minimum insulation resistance which the cable is to have ; in other words, whether the limits set by the purchasers of the cable on the amount of resistance in the conductor to the flow of the current, and the amount of leakage through the insulating envelope, have been exceeded or not.

The shipment of the cable next claims attention. The cable-steamer is lying at her moorings some distance out in

*A set of testing instruments for submarine-cable work, somewhat less elaborate than used in a cable factory, was illustrated on page 17 of SCRIBNER'S MAGAZINE for July, 1889.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the river, taking in her priceless cargo; and it is safe to say that the loading of no other ship presents such a curious and interesting scene. The cable is undulating in the air like an enormous eel as it emerges from the factory on the river-bank and travels over guides mounted on tall floating frames until it reaches the ship's side, over which it glides and immediately dives down into

Cable-hut at Shore-end.

the dark recesses of the hold, where a gang of men are busy coiling it away, at the rate of four or five miles an hour, into one of the four iron tanks with which the ship is provided.

On board the ship there is a scene of confusion. The deck is strewn with packing-cases galore; stores of every description, some for use on board, others comprising complete equipments —from heavy furniture down to buckets and brooms—for the telegraph stations which the cable is presently to call into existence, coils of wire, huge spools or drums of underground cable (similar to those which have lately become familiar objects on the street to every New-Yorker), to connect the landing-places of the submarine line with the town offices, galvanized iron cable-huts to be erected for the reception of shore-ends and instruments at these landing-places, tools of every description, huge iron buoys, coils of rope and heavy chain, grappling-irons and mushroom-anchors, cases of instruments, and formidable looking trays of electric batteries; all these myriad objects — many of them labelled with queer-sounding Spanish names indicating their ultimate destination—surround one on all sides, as the work goes on of taking them on board and stowing them away in their proper places; there to remain until the hour arrives when they shall be called into action or unloaded in distant ports, to undergo stern and critical examination at the hands of grave and dignified, or perhaps fussy and exacting, Iberian custom-house officials.

The cable, which, after all, is the principal character in this varied scene,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is being dragged on board by steam machinery in a sluggish, hesitating sort of manner. Perhaps it is being coiled away into one of the tanks somewhat distant from the engine which is hauling it on board; in which case it is guided to the hatchway above the tank by means of grooved pulleys and long wooden troughs provided with little iron rollers, over which it rattles and whirrs merrily.

In order to see the most important passenger that the ship is to carry installed in the depths of the dark, capacious state-room provided for its accommodation, it is necessary to take a peep between decks, and find one's way to "tank square," as the square opening on the main deck above the tank is called. Arrived at the tank in action, and standing at its edge, one can peer down into the gloomy depths; overhead a large grooved wheel, fixed above the centre of the tank, guides the cable so that it hangs clear and in a position to be easily manipulated by the gang of men, who gradually appear visible below as one becomes accustomed to the dim light shed by a few ship's lanterns hung around the sides of the tank. In the centre of the tank is a large iron truncated cone, which forms the eye of the coil of cable, and which, being hollow, also serves as a receptacle for perishable stores or fresh water for the consumption of the ship's company. The cable is arranged in flat coils occupying the whole space between the cone and the side of the tank; each coil is technically known as a "flake." In order to prevent one turn of the cable adhering to either of its neighbors, and thus producing a "foul," or a skein of several turns of cable coming up together when paying out, the cable is freely treated with whitewash to counteract the natural stickiness of the pitch-like exterior compound; as an additional precaution, boards are placed at intervals over each completed flake, thus obviating the risk of a "foul flake."

The whole scene, to an unaccustomed observer, possesses a weird, uncanny air; the gloomy cavernous tank, the lithe black cable, writhing and swishing around with a ceaseless serpentine motion, the ghostly figures of the men, who, viewed by the dim and fitful yellow light below, seem like creatures of another world; and to heighten the unearthly effect, a sort of gruff incantation, echoing and reverberating as it ascends from the gigantic caldron, assails the ear and accentuates the general resemblance to some séance of the black arts on a large scale; until, by listening intently, the mysterious notes are found to resolve themselves into a chorus in vogue with sailors all the world over, but peculiarly appropriate among such surroundings.

"Heigho! Roll the man down!"
"Heigho! Roll the man down!"
"*Give* a man time to roll the man down!"

The ships were loaded, the cable was all coiled snugly down in the tanks, batteries, instruments, and stores were all stowed away, and on the date appointed for sailing, which turned out to be a glorious September day, we sped through the green fields of "the garden of England," down to Greenhithe, where the two ships composing the expedition were lying at anchor, only awaiting the final operation of "swinging ship," and the arrival of the numerous staff of engineers and electricians, who generally join the ships at the last moment. Our train discharged quite a number of fellow-voyagers, some of them accompanied by their friends. A turn of the road brought the river in view, and right before us were the two good ships in which our principal interests were to centre for the next few weeks. They were looking their very best; yards squared, rigging taut and trim, bunting flying gayly in the autumn breeze; the blue peter at the fore, a few whiffs of steam escaping from the waste-pipe, and a thin haze of smoke ascending from the smoke-stacks, indicated that all was in readiness for departure. At the landing-stage we found the ship's gig awaiting us and in a few moments we were standing on the deck of the Dalmatia, the flag-ship of the expedition, as indicated by the swallow-tailed house-flag flying at the main, which signified that we carried the commodore of the squadron, in the person of the engineer-in-chief of the expedition.

The ship was in spick and span order, the deck clean and white, brass-work shining like gold, ropes coiled neatly

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

away, wood and iron redolent of fresh paint and varnish; and, were it not for the absence of guns and the very evident presence of the cable machinery which on all sides arrests the attention, we might have fancied ourselves on board some man-of-war commanded by a strict martinet.

The operation of "swinging ship" was concluded, the boats were hoisted up to the davits, the accommodation-ladder hauled up and lashed securely to the rigging; the steam winch was working heavily, and in a few minutes the anchor was weighed and we were steaming down the river. When we had the ship to ourselves, all the visitors having departed, the first thing to be done was to make a tour of inspection and gain some insight into the functions of the masses of heavy machinery which occupied the greater part of the deck from stem to stern. Starting from the bow we first observed the "bow sheave," a large iron pulley, deeply grooved, which projects out over the cutwater and serves to guide the cable in-board when the ship is engaged in "picking-up," a term which explains itself. The next prominent object was the dynamometer, a large iron sheave or pulley mounted on a frame, arranged so as to slide up and down, with a range of several feet, in a tall iron support; the wheel being balanced by weights, when the cable or a grappling-rope is passed underneath, it indicates, by means of a pointer which passes in front of a graduated scale on the face of the iron support, the strain upon the rope or cable. Next we inspected the picking-up gear, consisting of a huge iron drum some six feet in diameter, worked by a powerful horizontal engine. Passing aft, we came to the paying-out gear, almost a replica of what we had already seen, except that the engines connected with the paying-out drum were of a lighter type than those forward, and that there were more appliances for holding the cable when it should be necessary, for any reason, to stop paying out [pp. 400–402].

The life on board a cable-ship is, as I have said, a thing of itself, differing widely from that of any other of the floating homes which at all moments are ploughing the seas. This we soon found out as we commenced to settle down and become familiar with our surroundings. We were not on board a passenger steamer, because there were no passengers of either sex; neither were we on a man-of-war—we had no big guns and no stern discipline. This latter element, however, was not entirely absent on the Dalmatia; every man on board had a certain position and certain work to do, and all the members of the staff wore uniforms similar to those of the ship's officers, the rank of each one being denoted by the number of stripes on his sleeve. The engineer-in-chief was the head of the whole expedition, and had entire charge of all the operations, and the ships were navigated according to his instructions. Immediately after him ranked the captain of the ship, and the engineers and electricians of the cable staff, and the ship's officers and engineers followed in due order, according to their functions and standing in the company's service. Our party in the saloon also comprised two Spanish officials, who represented their government at all the operations of the expedition.

Cable engineers are naturally great travellers, and among our party of some twenty odd, a large proportion had visited almost every part of the world, and could relate many a good story of their varied experiences and give us much interesting information about foreign lands. Conversation in the saloon was carried on in at least three languages—English, French, and Spanish.

As our voyage was to be a very short one before we reached the port where we were to commence operations, little time was devoted to the amusements which while away the long hours on an extended trip. Everybody on board was busy preparing for the work in perspective. Here was a group of engineers conning over charts, studying the proposed track for the cable, and discussing the knotty point of selecting a suitable spot for landing the shore-end. A little further on, the paymaster, surrounded by papers, writing up his "log," and near by the hydrographer, preparing a large chart which takes in all the ground to be covered by the entire sys-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tem of cables. In the testing-room, the electrician would explain the functions of the glittering instruments of ebonite and brass with which he was making a test on the cable in the tanks below. The only visible demonstration of what was being done was to be found in the movements of a little spot of light, which would be deflected from zero on a horizontal scale, and finally come to rest several hundred degrees to one side, as the assistant allowed the electric current to pass through the reflecting galvanometer. If the spot of light were to make sudden kicks or fly off the scale, the existence of something wrong would be revealed, perhaps a fault in the cable. But faults rarely develop on board ship, because the cable is perfect when it leaves the factory. In the ship's tanks it is kept cool by being always submerged in water, and as yet it has been subjected to no severe strain. When the time comes for paying-out, and the cable is straightened and has to bear a strain of several tons as it leaves the ship's stern, then any slight imperfection will be revealed; and although it may consist merely of a minute bubble of air which has burst and made a puncture in the gutta-percha into which you could not introduce a fine hair; although it may be only a crack so imperceptible that it would not admit of the insertion of the corner of a cigarette-paper, yet the current would escape, and, like the insignificant stream which trickles over a dam, would gradually widen the breach until the cable was electrically "broken down," and entirely useless for communication.

Pondering over the watchful skill which manufactures hundreds, and even thousands, of miles of this slender cord with such widely different materials as iron, steel, hemp, gutta-percha, and copper, and triumphantly attains a degree of perfection which necessitates the exclusion of even such minute flaws and imperfections as would pass unnoticed in almost any other branch of industry, we dived down below to the main deck and spent an instructive half-hour inspecting the huge iron buoys, grappling-ropes and irons, mooring-chains and anchors, and other paraphernalia which the cable hands were busily painting, splicing, and overhauling generally in order to prepare them for use. On deck the same activity was to be seen; the heavy cable machinery was being examined and tried, to insure all being fit for action, and at the stern a small machine was being fitted up and got into place; this was the sounding machine, with which we shall shortly become more intimately acquainted.

The dreaded Bay of Biscay was crossed without undue pitching and tossing; for once its troublous waters were comparatively calm. In due course, one fine September morning, we steamed into Cadiz Bay. The scene is a beautiful one. On one side the bright, clean-looking little town almost entirely surrounded by the sea; on the other, some eight miles across the bay, the old town of Puerto Santa Maria. We were delayed a few days while the necessary formalities as to landing instruments and stores, and other kindred questions, were gone through. Some difficulty was also found in selecting a suitable landing-place for the cable. Cadiz is surrounded by rocks, and also by currents. Rocks are undesirable in the vicinity of a cable under any circumstances, but rocks and currents combined arouse a feeling of unconquerable horror and aversion in the mind of an experienced cable engineer. Finally, one afternoon, when we had been at anchor in Cadiz Bay some three or four days, orders were given for both ships to weigh anchor, and we found that it had been decided to land the shore-end on a sandy beach at the far side of the bay, near Puerto Santa Maria; the connection with Cadiz town to be afterward made by means of a short cable skirting the anchorage in the bay. Thus the main cable would be safe from damage by rocks and currents, or by ships' anchors, and if the bay cable should be broken at any time by either of these causes, communication could always be maintained from the landing-place of the main line.

We steamed off and anchored as near in-shore as we could get, opposite the spot intended for the landing-place [p. 401]. All was now activity on board. No sooner were we at anchor than a couple of boats were despatched for the beach,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with a party of men and the necessary tools and implements for use on shore. On board, both picking-up and paying-out gear were being made ready for action, as they both played their part in landing the shore-end; huge coils of rope and a number of collapsed air-balloons made their appearance from below. These balloons were inflated with air to their full diameter of some three or four feet, and the quarter-deck of the Dalmatia began to assume the appearance of a giant's toy-shop. Meanwhile the shore party had firmly anchored to the beach two large "spider-sheaves," or skeleton iron pulleys. These were placed some two or three hundred yards apart, forming two angles of a parallelogram, of which the bow and stern sheaves of the ship made the other two. A rope was now carried from the stern of the ship to the shore, and, passing round both spider-sheaves, brought back to the ship and taken over the bow sheave to the picking-up gear. The cable was made fast to the rope and paid out slowly over the stern, the picking-up gear meanwhile heaving-in on the other end of the rope, and so hauling the cable gradually ashore. The rope was wound four or five times round the big drum of the picking-up gear, steam was turned on, and the drum, rumbling and reverberating, hauled the rope in; aft, the cable was wound four or five times round the paying-out drum, also revolved by steam in order to ease the strain, which, with about a mile of rope out between the ship's stern and her bow, is something considerable. As the cable leaves the stern, the *raison d'être* of the air-balloons becomes apparent. At intervals of about fifteen or sixteen yards one is securely lashed to the cable, and in this way the cable is floated from the ship to the shore, and not dragged along the bottom to run the risk of being damaged by rocks. Another advantage is that, if the cable is sagged by a cross current or tide, it can readily be straightened by stopping the paying-out, and heaving-in at the bows.

So far all had gone swimmingly, and our first bit of cable was over the stern and fairly in the water, and we felt that the work of the expedition was begun in earnest.

However, interruption came from an unexpected quarter. The Spanish littoral is dotted around with coast-guard stations, the special mission of whose occupants (who are called *carabineros*) is the prevention of smuggling. We had no permission to land tools of any sort, much less a cable, and as we happened to pitch upon a spot close to a coast-guard station, the *carabineros*, alarmed at the sight of so many strange implements, came off in hot haste to order us to put a stop to our unlawful proceedings. It was explained to them that the cable was for the Spanish Government, and that everything had been arranged with the authorities in Cadiz; but they were obdurate, and, having received no instructions, were bent upon vindicating their authority. Your true Spanish official is nothing if he is not dictatorial, and the lower his rank the more authoritative he becomes. Diplomacy was then resorted to, and proved successful. The *carabineros* were assured that their demands should be complied with, and one of our best Spanish scholars was deputed to show them over the ship, *down below*. While they were being thus entertained (the contents of the chief-steward's bar formed no unattractive feature of the entertainment, and served to prolong it considerably), operations were continued, and by the time the *carabineros* came on deck again, a long line of balloons could be seen bobbing gayly on the water, all the way from the ship to the shore, and the end of the cable was safely on the beach. During the operation of landing the shore-end, communication was maintained between the party on shore and those on board by means of flag-signalling, a small hand-flag being employed to send messages in the Morse code. As soon as there was enough cable on the beach to reach to the site selected for the cable-hut, "Enough cable on shore" was signalled to the ship, and paying-out was at once stopped. The long rope was detached from the cable and rapidly hauled on board by the picking-up gear, boats were despatched to remove the balloon buoys from the cable and bring them back to the ship, while the shore party busied themselves in burying the cable on the beach and collecting the tools.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

By this time it was nearly dark and flag signalling had to be exchanged for flash-lamps, by which the Dalmatia signalled to the shore party to take all gear to the Cosmopolitan, as she was about to start paying-out seaward. All being made fast on shore and the last balloon buoy having been removed, we weighed anchor and moved on slowly toward the open sea.

The cable now needed no steam power to help it out of the ship; on the contrary, it ran out freely of its own accord, and it was necessary to apply the brakes to the paying-out drum to prevent the cable running out too fast. It was astonishing to see the great heavy iron-bound cable, a single yard of which would weigh over ten pounds, come swishing round the tank, up on deck and over pulleys and guides, take four or five turns round a drum six feet in diameter, bob under the dynamometer, and up over the stern-sheave, and finally dive into the water with all the ease, grace, and pliability with which a silken cord might go through the same performance.

One striking thing in cable operations is the hearty will with which everyone works, and the extreme anxiety evidenced on all sides for the welfare and safety of the cable. I have seen the engineer-in-chief, during the landing of a shore-end, up to his waist in the surf, cutting the lashings which secure the balloon-buoys to the cable; and on another occasion, when, the ship being hove-to, the cable had got foul of the propeller, the chief of the expedition, after passing word to the ship's engineers not to move the engines, took a header into the water, and, holding on to a blade of the propeller, succeeded in freeing the cable, to the great relief of everybody on board, as all efforts from above had failed to dislodge it and a rupture seemed unavoidable.

During paying-out a test is always kept on the cable from the electricians' head-quarters, the testing-room. Before the cable left the ship the end was carefully sealed by softening the gutta-percha and drawing it over the copper conductor; the cable was then charged with an electric current through the end on board, the current also passing through the galvanometer. We paid a visit to the testing-room and found by the steady deflection of the spot of light on the scale that the cable was sound and perfect.

The scene on deck is novel and interesting. The quarter-deck is brilliantly illuminated by electric light, which throws the mass of moving machinery and the figures of the men into bold relief; the big drum rumbles, and the pulleys and sheaves whir as the cable swishes over them, scattering whitewash in all directions. Every now and then a voice rings out announcing the number of revolutions of the drum, or word is passed up from the tank, couched in strange terms, which we are only just beginning to understand. We have been paying-out for about two hours, when warning comes from the tank that only forty-five turns remain of the piece of cable which it was decided to pay out; the ship's engines are slowed down, and a few minutes later stopped altogether. A huge red iron buoy is in readiness, lashed to the mizzen rigging; paying-out is stopped and the cable made fast close to the stern sheave, the turns are taken off the drum, the cable is cut, and the extremity of the core sealed; the cable end is then secured to the moorings of the buoy, which consist of two heavy mushroom-anchors attached to the buoy by a length of stout iron chain. The lashings which hold the cable at the stern sheave are then removed, and the cable end is dropped overboard with the buoy-moorings; the chain rattles out with an appalling noise, above which a stentorian "Let go" is heard, whereupon the buoy is released, and, dropping with a splash into the water, floats gayly off, dancing in the rays of the electric light. There the buoy will remain securely anchored by its moorings, until the Dalmatia returns from the Canaries paying-out the main cable; the end of the piece we have just buoyed will then be brought on board and spliced on to the main cable, thus making it complete.

As we set on full speed for our anchorage, everyone on board felt that the work of the expedition had been successfully begun. An air of contentment prevailed on all sides; at dinner the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

health of the cable was drunk with due solemnity, and afterward an impromptu smoking-concert was held on deck.

On the following day, our business at Cadiz having been completed for the present, the expedition put to sea *en route* for the Canaries. The Cosmopolitan steamed out first, saluting the Dalmatia as she passed by dipping her ensign, to which we responded with three cheers, and a few hours later we followed suit.

The programme to be carried out by the two vessels was as follows: The Cosmopolitan was to make a zigzag course to the Canaries, taking short slants east and west of the proposed route of the cable, and sounding at intervals; the Dalmatia was to proceed in the same manner, except that her zigzags were to be longer and at a different angle to those of the Cosmopolitan. In this way it was hoped that a thorough survey would be made of the ocean depths between Cadiz and the Canaries, and a safe route selected for the cable. At Cadiz our scientific staff had been augmented by the arrival on board of a distinguished chemist and naturalist, who accompanied the famous Challenger expedition, and who, therefore, was an authority on the subject of ocean surveys, and took a vast interest in all such matters. This gentleman was prepared to analyze and tell us all about the constitution and properties of as many samples of "bottom" as we could obtain for him, and he has since produced some remarkably interesting papers of high scientific value, embodying the results of the immense amount of work performed by the expedition.

By the time we got clear of Cadiz harbor the Cosmopolitan was "hull down," and we saw no more of her till we met in Grand Canary. The course of the Dalmatia was shaped for the Straits of Gibraltar, and soon after leaving Cadiz we took our first sounding. The little machine which then came into action, and played a prominent part in the work of the next few weeks, is worthy of a little attention, both on account of its simplicity and because of the amount of good work that it performs in a rapid and trustworthy manner. The sounding machine [p. 403] consists mainly of a light iron drum or spool, upon which are wound several thousand fathoms of steel pianoforte wire; to the wire is attached a sinker which is provided with a receptacle at the lower extremity for securing a specimen of the bottom. When the wire is being paid out the drum projects over the ship's stern, and for hauling-in it is run in-board a few feet and connected to a small steam engine, which makes short work of winding up the wire and bringing the sinker to the surface. Besides the ordinary sinker there is a whole battery of other apparatus, such as sinkers with weights which are detached automatically on reaching the bottom, leaving only the tube to be brought up; thermometers which register the temperature of the water at different depths; tubes constructed to obtain samples of water from the bottom, and so on *ad infinitum*.

Our first piece of scientific work was a survey of the "Gut," as the entrance to the Straits of Gibraltar is commonly called by mariners. This was slightly out of our strict programme, but served to get our hands in for more important operations to follow.

Having spent nearly three days in this interesting work, during which time we obtained a quantity of new and valuable information as to the formation of the bank at the entrance to the Mediterranean, we started out seaward, and rapidly got into deep water. Here the sounding machine showed to great advantage. In olden times, when hemp lines were used for sounding, it was necessary to employ a weight of about four hundred and fifty pounds to keep the line vertical, and about three hours were occupied in taking a sounding in a depth of two thousand fathoms. With steel wire we used a sinker of only fifty pounds, which in twenty-two minutes reached bottom at a depth of a little over two thousand fathoms; there was a delay of a few minutes in detaching the weight and in connecting the drum to the engine to wind-in. The weight was detached automatically, the wire by which it was suspended to the tube being cut through by a hinged knife on the head of the tube at the moment when strain was applied to wind-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in; the weight was thus left on the bottom and the tube alone brought to the surface. In this way there is very little strain on the wire, and consequently but slight risk of breakage. The little engine commenced to buzz away, and in forty-eight minutes from the time of letting go the tube was on board again, and the ship proceeded on her course. We all crowded round to examine the little instrument which had made its venturesome descent through some two and a half miles of blue water. General satisfaction was caused by the fact that the specimen obtained was one of *globigerina* ooze, which consists of myriads of tiny shells of carbonate of lime. The existence of this ooze denotes the entire absence of currents, and the ooze itself forms a soft, yielding bed into which the cable would sink luxuriously, and might rest undisturbed to the end of time.

About every four hours we stopped to take a sounding, and the results were almost invariably satisfactory. Occasionally a sounding was spoiled by the wire kinking and breaking, the consequence being the loss of the tube and a certain amount of wire; but so carefully were the operations conducted that this was a very rare occurrence. Deep-sea sounding is very interesting work, but it is a trifle annoying sometimes to hear the engine-room gong sound, and have to leave a good hand at cards and rush up on deck, especially if the weather is rough, when the whole sounding party stands a chance of getting a good drenching from a "poop sea."

One night we were astonished by the sinker stopping at about one thousand two hundred fathoms, when it ought to have gone nearly twice as deep. It was at once suspected that we were in the neighborhood of a bank. A sounding was taken three miles further on and showed deeper water, so we retraced our course eight miles; here we got only eight hundred fathoms. Expectancy then ran high, and it was fully justified when, two miles further back, the sinker stopped at four hundred and fourteen fathoms; but the crowning event occurred at the next dip, after another run of two miles. Here, to our surprise and delight, the sinker brought up at sixty-six fathoms! There was immense excitement on board, as it was obvious that we had pitched upon a bank, or rather a mountain, of startling proportions, perhaps the lost island of Atlantis itself. As this submarine mountain lay close to the proposed line of the cable, it was necessary to make a thorough survey, and two days were spent in doing this. A mark-buoy was put down to work by, and numerous soundings were taken in all directions so as to clearly define the limits of the bank. The shoalest water found was forty-nine fathoms, and half a mile distant two hundred and thirty fathoms were obtained, showing a steep slope. When the buoy, which was moored in one hundred and seventy-five fathoms, was taken up, the mooring rope was found to be nearly chafed through seventy-five fathoms from the bottom. This showed that the bank must rise almost precipitously, and that there exists a wall of about four hundred and fifty feet in height. A very curious effect observed was a long ripple on the calm sea, apparently caused by the ground-swell breaking on the edge of the bank.

Nothing further of an exciting nature happened during the soundings, and after one more zigzag our course was shaped for Grand Canary, our rendezvous with the Cosmopolitan. The Cosmopolitan had made no such interesting discoveries as had fallen to our lot, and having been awaiting our arrival several days, those on board finally became alarmed at our delay and started out to look for the Dalmatia. We met the night before our ship was due to arrive at Canary, and rockets being fired, the two steamers recognized each other, and a conversation was kept up by means of the steam-whistles, the Morse code adapting itself as well to this method of signalling as to any of the many others in daily use.

The following morning both ships were at anchor in the harbor of Las Palmas, the capital of Grand Canary. During the next week or two we visited the different islands, taking soundings between them and spending a few days at each port. Receptions were given on board to which the authorities and principal inhabitants were invited, and all the wonders of the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ships were explained to them. Everywhere the greatest enthusiasm was displayed, as the natives looked upon the establishment of telegraphic communication as a great step in putting them in touch with the civilized world. Public rejoicings and fêtes were the order of the day. At Las Palmas a ball was given to the officers and staff of the expedition, and (considering that we were in such an out-of-the-way place) we were fairly astonished at the scale of magnificence on which the entertainment was carried out, and at the dresses and jewels of the ladies, while not a few members of the staff were considerably smitten with the personal charms of their partners; but unfortunately, with but few exceptions, they could not exchange five words with them. At Teneriffe the chiefs of the expedition were escorted through the streets by a band of music and an immense crowd, and at La Palma, the western island of the group, the ships were serenaded, the town was en fête and decorated with triumphal arches, and another ball was given. Altogether, we were the heroes of the day throughout the Canaries.

It was decided to lay the cable between Teneriffe and La Palma first, and the necessary soundings having been taken, both ships steamed round Teneriffe one fine November evening, and came to anchor off Garachico, a little village on the southwest coast of Teneriffe. Here it was proposed to land the cable, the connection between Garachico and Santa Cruz, the capital of Teneriffe, to be afterward made by a land-line across the island.

At Garachico we spent several days. The coast being barren and rocky, considerable difficulty was experienced in finding a suitable landing-place for the shore-end. Finally a spot was selected, and the shore party signalled that they had engaged a team of oxen to haul the end on shore, as the bad ground rendered it unadvisable to employ the usual method of working the whole operation from the ship. Everything went well and the end was soon successfully landed, and all being made fast on shore, the Dalmatia paid out about a mile of cable seaward; then cut and buoyed the end in the same manner as at Cadiz.

The next few days were occupied in erecting the cable-hut [p. 404] (a small structure of galvanized iron about twelve feet square), in fitting up the testing instruments in the hut, and in transferring a few miles of heavy cable from the Cosmopolitan to the Dalmatia. Finally all operations at Garachico were completed, and early one morning we started for the buoy and picked it up, and with it the end of the cable secured to the buoy moorings. The cable end was brought on board and spliced to the cable in the tank from which it was intended to pay-out. The splice is always an interesting operation to watch. First the jointer and his assistant go to work and nimbly and rapidly join and solder the ends of the copper conductor, and then cover it over with sticky black compound and gutta-percha sheet, producing a homogeneous joint but little larger than the machine-made core, and every bit as impervious to the action of the water. The joint is tested by the electricians to make sure that it is sound and perfect, and this being ascertained, the cable hands at once go to work on the splice; and it is surprising to observe how skilfully they manipulate the stiff iron wires, first carefully wrapping the core with its protective hemp covering, then laying on the armor wires and butting them together, and finally winding over the whole length of the splice a stout cord of spun yarn.

The splice was finished and we started paying-out, slowly at first, but with gradually increasing speed, until deep water was reached and the light deep-sea cable went whizzing through the machinery at the rate of seven or eight knots an hour. Now we were at work in earnest. One of the engineering staff was in charge of the quarter-deck, keeping a watchful eye on the dynamometer and the indicator on the paying-out drum; by the former he knew the strain on the cable, and by the latter the amount of cable paid out; of these data an assistant was continually taking notes. In the testing-room we found that a careful watch was being kept on the electrical conditions of the cable. The sensitive spot of light was doing its duty both here and in the cable-hut, and the electricians on shore exchanged sig-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

nals every few minutes with those on the ship. Thus both the mechanical and electrical behavior of the cable were continually under such scrupulous and accurate observation, that it was impossible for anything to go wrong without those in charge being at once aware of it. The ship steamed steadily ahead and everything worked as smoothly as clockwork; coil after coil of the cable unwound from the tank, glided over pulleys and through troughs, wound around the swiftly revolving paying-out drum, dived under the wheel of the dynamometer and over the stern sheave, and trailed away after the ship until, a good many yards astern, it silently dipped into the water to seek its final resting-place in the motionless depths.

As darkness came on the arc-lamp was lighted, and with the aid of its brilliant rays work was done as easily as during the daytime. Toward midnight we approached La Palma, and the Cosmopolitan steamed ahead to show us a good position for buoying the end, which operation was necessary, as the La Palma shore-end had yet to be laid. Gradually our speed was slowed down; the electrician on duty in the testing-room informed those in the hut at Garachico that we were about to cut the cable and buoy the end, and immediately afterward, as the ship had come to a standstill, the cable was made fast, the turns were taken off the paying-out drum, the executioner advanced with his axe and severed the cable, the wounds to its centre-nerve were healed up by means of a spirit-lamp, it was fastened securely to the moorings of the buoy, and in a few minutes cable, moorings, and buoy were all overboard and we steamed off for port.

The next day the Cosmopolitan took up the work and met with ill-luck, which proved to be only the commencement of a series of disasters. To begin with, while the cable-hut and tools were being landed, one of the boats was capsized by the surf, the contents scattered broadcast, and a man imprisoned under the overturned boat. This unfortunate was, however, quickly rescued by his companions and equally quickly resuscitated, being more frightened than hurt. The shore-end was successfully landed, and, as night was coming on, the Cosmopolitan started to pay out toward the buoy put down the previous night; the buoy was picked up and the mooring-rope taken to the picking-up drum, which at once commenced to heave-in; but after a few turns, a sudden diminution of the strain on the rope showed that it had parted, and the end of the cable was lost! There was nothing to be done but buoy the end of the short length just paid-out and return to port, as it was too late to attempt to grapple for the lost cable.

For the next two or three days the weather was so bad that nothing could be done, but finally, when everybody's patience was thoroughly exhausted, wind and sea moderated sufficiently for us to set to work. A grapnel was lowered over the bows by means of a long rope, the end of which was taken under the dynamometer to the picking-up drum. The dynamometer serves in this case to show when the grappling-iron hooks the cable, as it at once indicates the increased strain on the rope. We steamed slowly back and forth across the course of the cable, and made four or five unsuccessful drags. Once we hooked the cable but only succeeded in bringing up a loose piece, as it parted further seaward. The scene on board now is very different to a few days back, when paying-out was going on so smoothly. All the machinery on the quarter-deck is motionless and deserted; in the testing-room the active little spot of light is extinguished and the place wears an untenanted air; interest is concentrated forward, where the engineers watch every rise and fall of the pointer on the dynamometer with acute anxiety. Electricians and others on board who find their occupation gone, hang about, listless and dejected, and a general air of discontent reigns. We are grappling in deep water, and, as is evident by the jerky action of the dynamometer, on rocky ground; but finally, after a long and weary day, a steady strain is observed, the picking-up drum is set to work, and after a vast amount of laborious puffing and rumbling, shortly before midnight the grapnel arrives at the bows with the cable securely suspended across two of its prongs! At once all is activity on

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

board. The testing-room brightens up and the spot of light shines cheerfully once more. The cable is cut and handed over to the electricians to be tested. Very shortly the verdict is delivered to the effect that it is in perfect condition, and at once the operation of splicing it to a new length of cable in one of the tanks is commenced; this concluded, we start paying-out, and all goes well until we reach the buoy on the shore-end.

Here a double disaster occurred; the experience of the Cosmopolitan was repeated, as the moorings broke shortly after we commenced heaving-in. It was then necessary to pick up a short length of the cable we had just laid, so as to cut and buoy further out.

While this was going on we dropped into the testing-room to see that matters were all right there, and scarcely had we commenced to watch the spot of light, when it quivered, oscillated, and finally darted off the scale. Something was wrong, and we made for the deck, where our suspicions were confirmed; the cable had broken, and a few minutes later we were all gazing mournfully at the jagged end—a mere bunch of tangled wires and hemp! Both ends were now lost, and there was nothing for it but to start grappling again. Drag after drag did we make with the same lack of success; occasionally the strain went up with a rush as the grapnel clutched a rock, only to decrease with equal suddenness as the rock gave way and the grapnel flew off. Our spirits rose and fell with the pointer of the dynamometer, and when it only indicated the normal strain of the rope and grappling-iron, we all sank, mentally speaking, far below zero.

This sort of thing went on all day. At 12 P.M. the grapnel was at the bows but no cable, so work was suspended for the night and everyone turned in for a well-earned rest. The following day our luck changed. The cable was hooked at the first drag and brought safely on board; the tests showed that it was still perfect, and the splicing and paying-out were proceeded with in due course. Meanwhile the Cosmopolitan had grappled and re-buoyed the other lost end, so we had no more difficulties to encounter. While paying-out, the submarine crater over which we had evidently been working, and which had given us so much trouble, was carefully avoided by taking a circuitous route. The buoy was soon reached and the other end hauled on board. Both cables were carefully tested and pronounced to be perfect, the final splice was made, and with three hearty cheers the completed cable was lowered overboard.

Finis coronat opus. Our first complete section was finished, and Teneriffe and La Palma were in telegraphic communication with each other.

The rest of the work among the islands was carried out without a hitch of any sort, the long cable from Teneriffe to Cadiz being left to the last. This was of course a matter of several days, and may be taken as a good example of the routine on board when laying a long cable. Mile after mile of cable goes steadily out; the machinery whirrs and revolves as if it never would stop, the spot of light in the testing-room behaves with perfect propriety, and only oscillates once every five minutes, when those on board exchange a signal with the man on watch in the cable-hut at Teneriffe. Every four hours tired engineers and electricians go below and take their share of refreshment and rest, as sleepy substitutes come on deck to take their places. One startling incident relieves the monotony of this prosperous state of affairs. On the third night out, the eccentric behavior of the dynamometer indicating a varying strain, shows signs of an irregular bottom. At the same moment the Cosmopolitan, engaged in taking soundings a few miles ahead, is seen to fire a rocket. Shoal water is immediately suspected, and the Dalmatia is put full speed astern and cable paid out freely. It was found that the Dalmatia's course lay directly across a bank with only eighty-four fathoms of water on top, and nothing but the prompt way in which the situation was grasped by the engineer on watch averted an accident; for if paying-out had been continued at full speed, the cable would have festooned from the edge of the bank and most infallibly been broken.

The foregoing narrative of a cable-laying expedition is a typical description

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of the manner in which the great work of lessening the separation set up between continent and continent by the trackless ocean is carried out. Nowadays it is not the good fortune of all cable expeditions to open up new ground and be welcomed and feasted by the natives, as much of the cable work which is being constantly carried on in all parts of the world consists of the renewing, duplication, or triplication of existing lines; and the laying of a new cable has come to be so much a matter of course that such an event arouses the merest spark of passing interest, although books which have become classical were published chronicling the progress of the early Atlantic cable expeditions.

The reader has taken a glance at the manufacture of the submarine cable of to-day, he has seen how the ocean depths are surveyed almost with as much care as the land for a new railroad; he has watched the landing of a shore-end, and has seen the deep-sea cable trailing steadily out into blue water; he has participated in the joy and enthusiasm of dropping overboard a final splice, and in the disappointments and anxiety attendant on grappling for a broken cable on rocky bottom. Altogether he has made a fair acquaintance with life on board a cable-ship; and if he can point out any other branch of electrical work equally interesting and fascinating, I should much like to know which he would select.

HORACE, BOOK III., ODE IX.

THE LOVERS' QUARREL.

[Donec gratus eram tibi.]

Mr. Gladstone's Translation.—Reprinted by permission with Mr. Weguelin's drawing [frontispiece].

HE.

While no more welcome arms could twine
Around thy snowy neck than mine,
Thy smile, thy heart, while I possest,
Not Persia's monarch lived as blest.

SHE.

Whilst thou did feel no rival flame,
Nor Lydia next to Chloe came,
Oh! then thy Lydia's echoing name
Excelled even Ilia's Roman fame.

HE.

Me now Thracian Chloe sways,
Skilled in soft lyre, and softer lays,
My forfeit life I'll freely give
So she my better life may live.

SHE.

The son of Ornytus inspires
My burning heart with mutual fires,
I'll face ten several deaths with joy,
So fate but spare my Thracian boy.

HE.

What if our ancient love awoke
And bound us with its golden yoke?
If auburn Chloe I resign
And Lydia once again be mine?

SHE.

Though brighter than a star is he,
Thou rougher than the Adrian Sea,
And fickle as light cork; yet I
With thee would live, with thee would die.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE CITY HOUSE IN THE WEST.

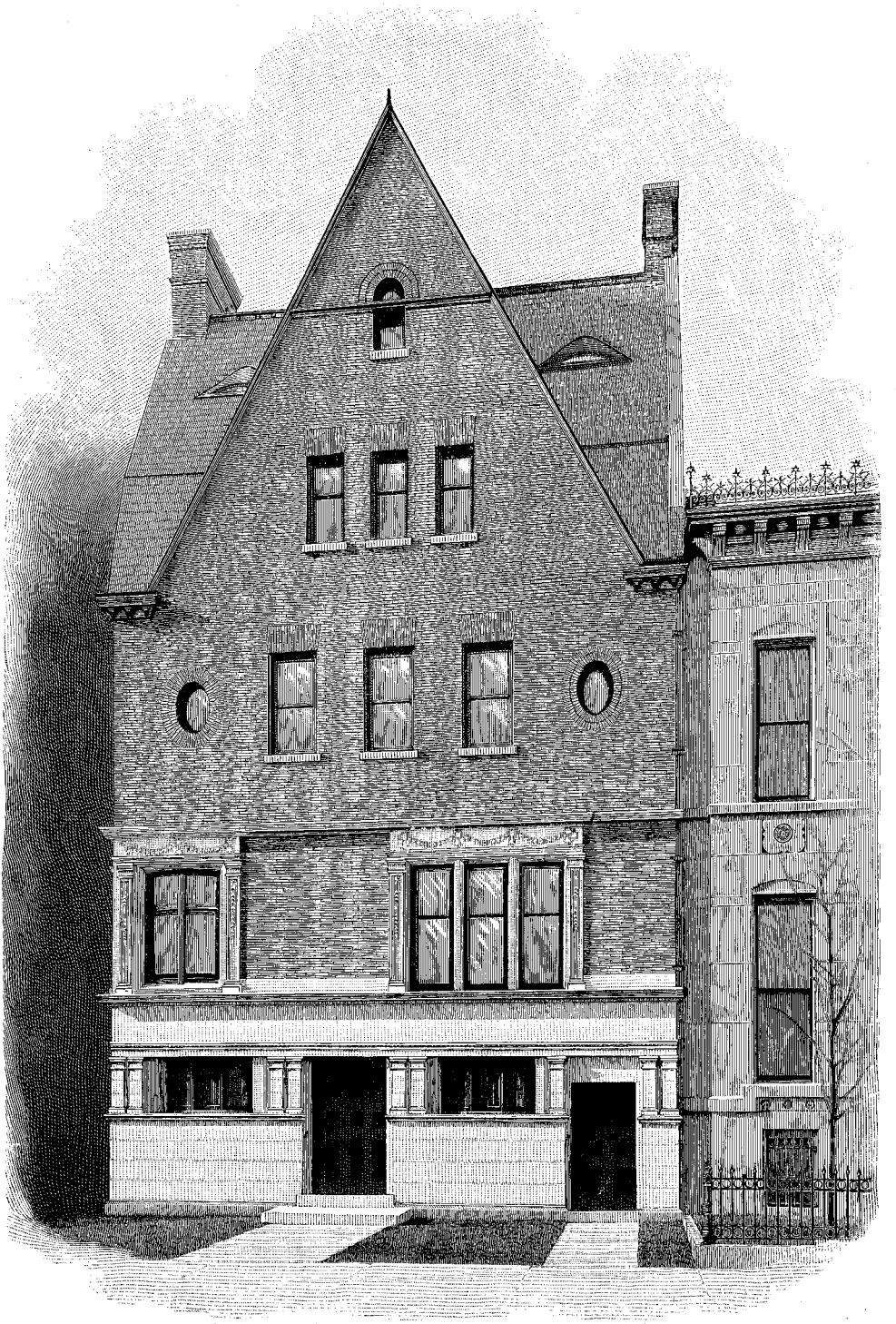
By John W. Root.

THE conditions attending the development of architecture in the West have been, in almost every respect, without precedent. At no time in the history of the world has a community covering such vast and yet homogeneous territory developed with such amazing rapidity, and under conditions of civilization so far advanced. Few times in history have ever presented so impressive a sight as this resistless wave of progress, its farthermost verge crushing down primeval obstacles in nature and desperate resistance from the inhabitants; its deeper and calmer waters teeming with life and full of promise more significant than has ever yet been known. Between the period of conquest and the period of realization there is for art in this great development a distinct hiatus. It is a long time full of deadness, except of physical force, then a sudden bursting of art into exuberant flower. Up to a time twenty years ago every energy of the hardy pioneers who were opening the vast district now called "the West" was expended in the most rudimentary work—that demanded by self-protection and self-support. Even now, in remoter districts, still sounds the Indian's war-whoop, and still exists something of those wild and barbaric conditions so recently conquered farther East.

During the period of this ceaseless struggle architecture, as we understand it, was not thought of; and the most primitive log-hut served for shelter. But as cities began to spring up, the "balloon-framed" wood house was evolved. This early type of dwelling has made the growth of the West possible. Frail as its structure seems to be, it has been the very fortress of civilization, withstanding all assaults of heat and cold, and often baffling the deadly cyclone where massive structures of masonry succumbed. Nothing could be more simple than its skeleton. Unlike the early dwellings of wood erected in the East, no expert carpenter was needed—not mortise nor tenon nor other mysteries of carpentry interfered with the swiftness of its growth. A keg of nails, some two by four inch studs, a few cedar posts for foundations, and a lot of clapboards, with two strong arms to wield the hammer and saw—these only were needed, and these were always to be had. For no sooner did the yell of the Indian grow distant upon the verge of the prairie, or over the slope of the hill, even if but for a few days, than its fierce sound was followed by the drowsy buzz of the saw-mill. Even to-day many Western cities, not only like Chicago, whose earliest growth dates back fifty years, but like Duluth, Minneapolis, Omaha, and others of later growth, are more than half made up of these frame houses. In Chicago the great West Side contains thousands of them. Their life, however, is now nearly finished; for in nearly every Western city of more than one hundred thousand inhabitants the law is passed that within city limits no wood house may be built; so that the next five years will see their total disappearance in favor of more or less substantial structures of masonry.

Thus these hardy pioneers of architecture, in their very disappearance, do architecture some service, for because of them every old Western city must be almost entirely rebuilt, and this under modern and enlightened auspices, as if it had been devastated by a great fire or cyclone. This is clearly an advantage to architecture and to civilization; that is, it may be a great advantage to architecture and to civilization. It certainly presents possibilities to the architects of the West such as have never been given to any other group of men. But with these advantages, it must be confessed, are disadvantages equally palpable; for it is evident that, by virtue of its ephemeral character, the "balloon-framed" house must in nearly

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



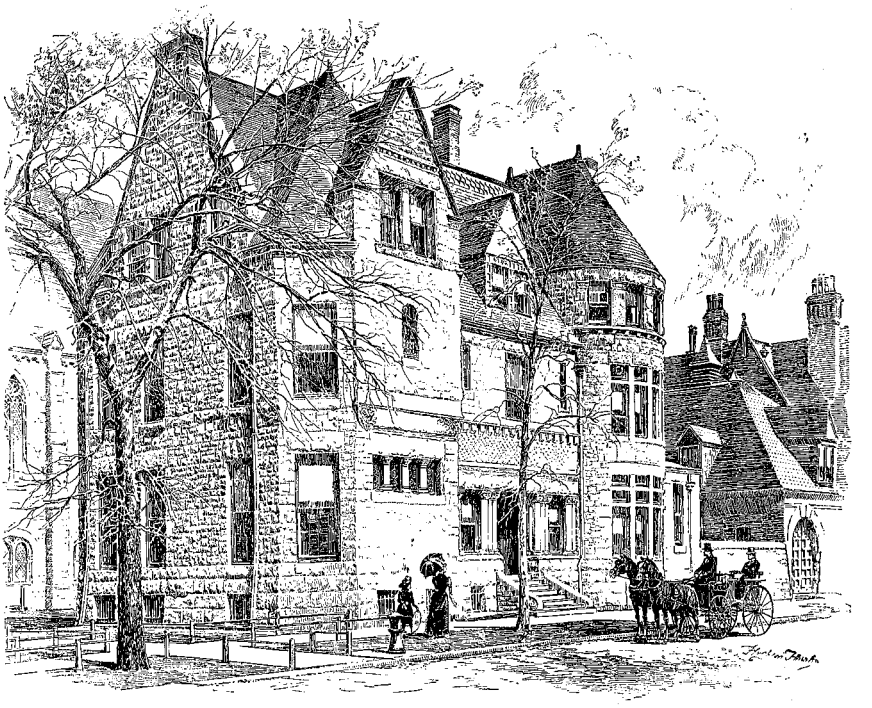
House in Prairie Avenue, Chicago, Ill.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

all cases fail to become the landmark, venerated for itself, the embodiment of tradition, a monument to the conservatism of a city's history. And similarly it can never become a link in the architectural development of the country.

With the increase of population, wealth, and railroad communication this early dwelling, still retaining its essential structure, grew into more ambitious expression. Its owner, following either his own taste or the equally untrained taste of the most available carpenter or "mill man," adorned it with all sorts of "ornamental" devices in woodwork—open-work scrolls under and above its gables, jig-sawed crestings on its ridges, and wonderful frostings and finials on its gables. The architraves about its windows were no longer content to be of simple boards, but were decorated by rosettes, star-shaped ornaments, and all kinds of forms, suggestive of nothing so much as "nudels" in a German soup. The clapboards or matched ceiling covering it were laid in all directions, sometimes horizontally, as often diagonally in one or two directions, or else in basket fashion, the joints being at right angles with each other. The verandas of these houses offered best opportunity for such display, and here jig-sawed railings and curiously turned or chamfered frosts ran riot.

This obvious and cheap form of decoration, by which a "plain" house was made "tasty" or "modern" to the citizen, persisted for many years. In wood, it was applied with great freedom to cornices and porches of houses built otherwise of stone, when such ambitious structures first began to appear; and forms thus originated in wood were afterward continued in metal, or even in stone itself. Perhaps this fashion gave to Western city houses of twenty years ago a gayer but less substantial appearance than was presented by Eastern houses of the same kind.



House on Dearborn Avenue, Chicago, Ill.

In Chicago, previous to the great fire of 1871, the typical city house, whether of wood or stone, or of both combined (for often a stone front was but a mask covering a structure in every other re-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

spect of wood), was in general arrangement not unlike the corresponding house in New York. There was the same high "stoop" covering the basement entrance, the same double front and vestibule doors with their transoms, the same narrow hallway with a straight flight of stairs separated from the entrance only

Reference has been made to certain wood-like stone decorations. One who has not seen these translations of wood into stone cannot understand how strange and weirdly interesting they were. Thus, for instance, a large dwelling in Chicago, built twenty years ago at a cost of more than one hundred thousand

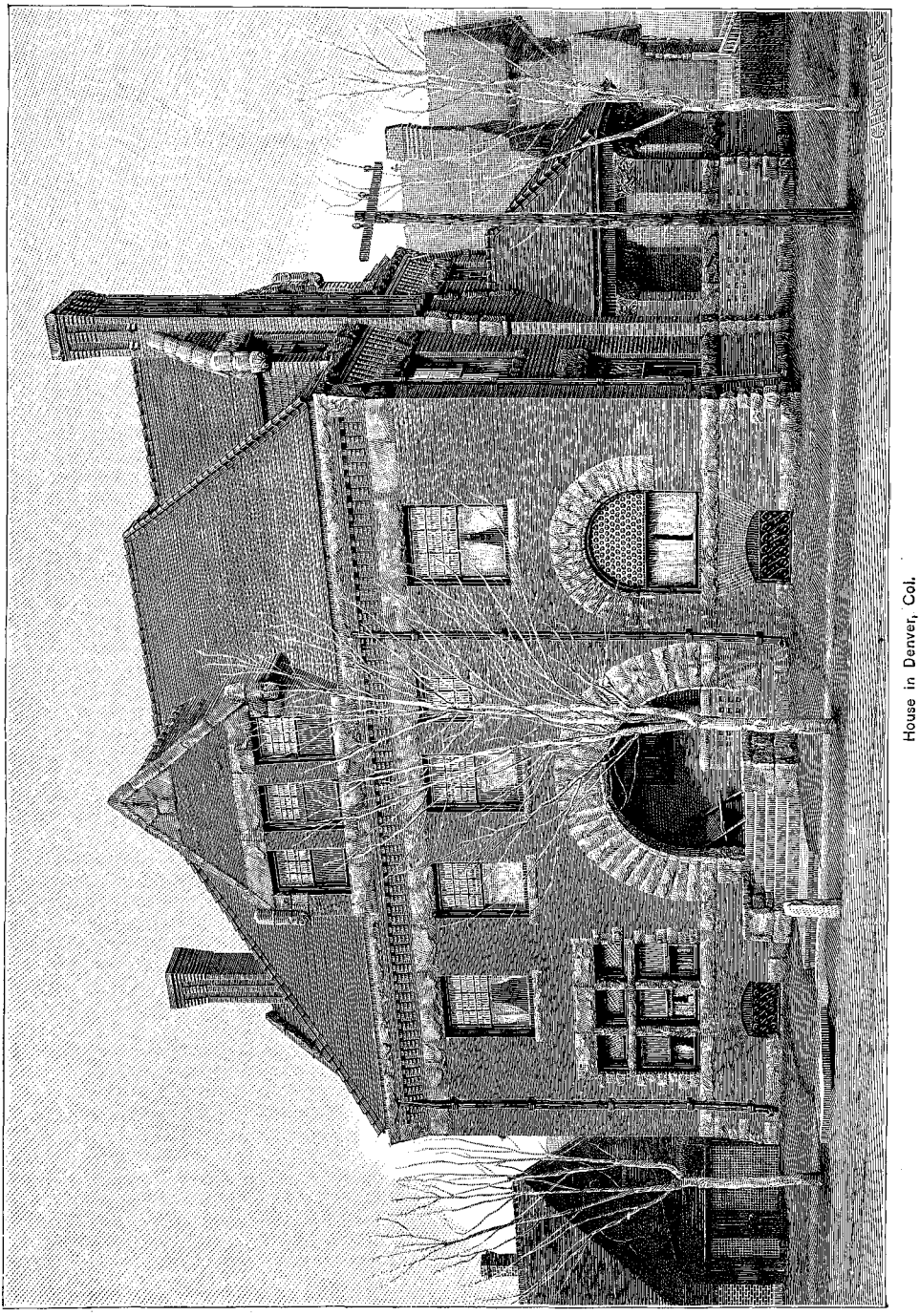
Old House in Cincinnati, O.

by space for the hat-tree, and the front and rear parlors on one side, sometimes with an L in the rear. The street aspect of such houses was different, however, in that it was, as it has been said, gayer and less solid. This effect was produced partly by the freedom with which wood, or wood-like stone or metal decorations were applied, and partly because the stone generally employed was a light limestone, turned with age to a beautiful buff, somewhat like the French Caen stone, which was in sharp contrast with the dark sandstone so commonly employed in the East.

dollars, is so designed that every person not informed supposes that the highly ornate cornice is of stone and the equally ornate bay-windows are of wood; while the reverse is the case, as is revealed once in five years or so (when the painter is called), when people laboring under the delusion are astonished to find a stone cornice being painted and wood bay-windows cleaned with water.

Bay-windows were, and still remain, a great feature of Western city houses. Their use has been almost universal; sometimes octagonal, sometimes square or segmental, sometimes round placed

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



House in Denver, Col.

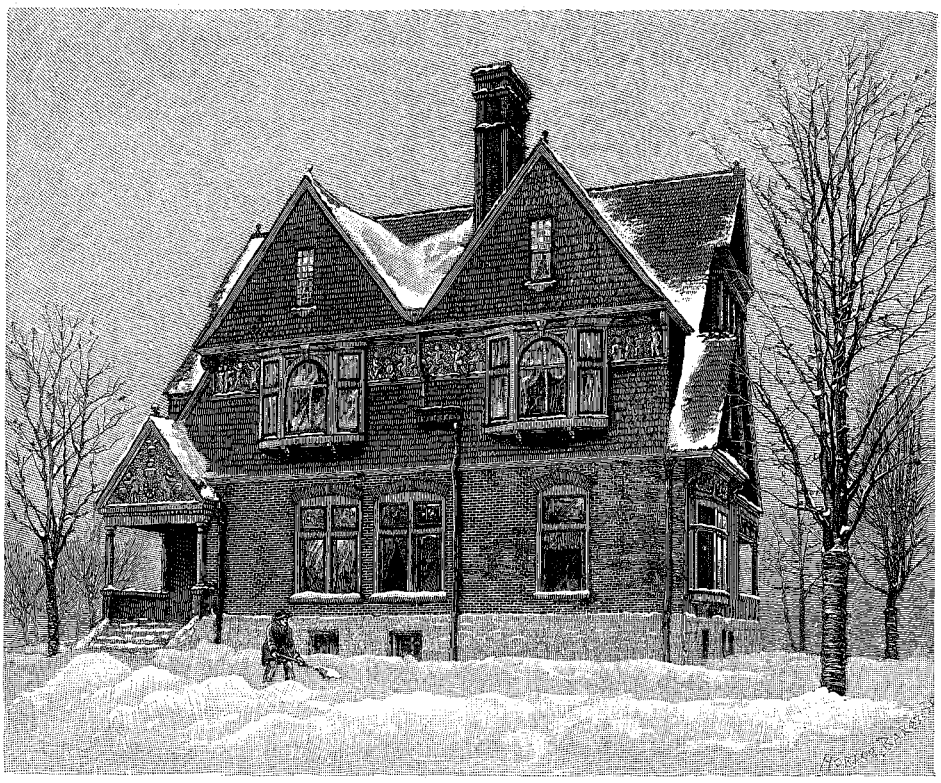
PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

upon the corner. The customary form twenty years ago, in Chicago at least, was a segmental bay, carried from the ground up to the top of the roof, which generally embraced three stories, this with the high basement being the maximum height of dwelling reached.

Because of the general crudity and haste of things, the architectural methods of this (to the West) early period were sometimes very remarkable. Complete drawings for dwellings to cost, say ten to fifteen thousand dollars, frequently consisted merely of plans and elevations drawn on a scale of one-quarter inch to one foot, supplemented by full-size sections of door and window architraves traced upon sheets of fool's-cap, and copied from the published catalogues of planing-mills. To vary the profile of a moulding from these published catalogues was, in this early day, considered a species of crime, because it entailed upon the manufacturer the cost of new "knives," and the old mouldings were, in any event, good enough for any person except an architectural prig. The width of these architraves and the number of mouldings used to form them were in direct ratio to the cost of the house; so that a very costly dwelling would have a group of mouldings about its doors and windows aggregating twelve, or often fifteen inches in width, these being sometimes made of alternating lines of different and strongly contrasted hard-woods, producing a most bizarre effect. Such an important feature as the main stair-way, with its newels, would be, in the specifications, described somewhat as follows (reference again being had to the published catalogue): "Main newel-post in front hall to be a twelve-inch diameter octagonal newel, heavily moulded, and enriched top and bottom. The hand-rail to be a 'double toad-back' rail, richly moulded, and four by five inches in section; the balusters to be octagon in shape, three inches in diameter, and

House on Dearborn Avenue, Chicago, Ill.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



House in Milwaukee, Wis.

heavily moulded." Notice the size of these things, and the splendor suggested by the constant recurrence of the word "heavily moulded."

Newspapers in these early days contained advertisements of houses for sale, which, beyond attractions such as are above set forth, would be stated to possess "stationary wash-basins in every room"—this before the days of adequate traps and ventilation. And yet some of the purchasers of these houses and some of their families did not die of malaria.

From the above general remarks St. Louis, Cincinnati, and Louisville must be somewhat excepted. These cities belong as much to the South as to the West. They began an earlier development, and hence were in closer touch with the East at an earlier period than cities farther north. The old city houses peculiar to them were, for this reason, of a much more conservative type than existed in cities like Chicago; and the frame house had not with them acquired the same importance.

The Cincinnati house illustrated on p. 419, built about twenty years ago, with its simple and dignified stone front, its surrounding stone balustrades, and the general air of family seclusion and repose is a very pleasant object to gaze upon, strongly reminding one of several old houses on Madison Avenue in New York, and of some facing the Public Gardens in Boston, the essential difference being that the Cincinnati house is constructed of light limestone, while those in Boston and New York are of dark sandstone. I think it will be considered that the persistence of this style of house in the older cities of America for so many years has been a very remarkable fact. It has dominated New York, Boston, and Philadelphia with scarcely a variation; and yet, in view of much of the work now being done in these same cities, as well as in cities of the West, we may be grateful that the style was more

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

inoffensive. Beside some of its younger brothers it becomes very much the fine gentleman.

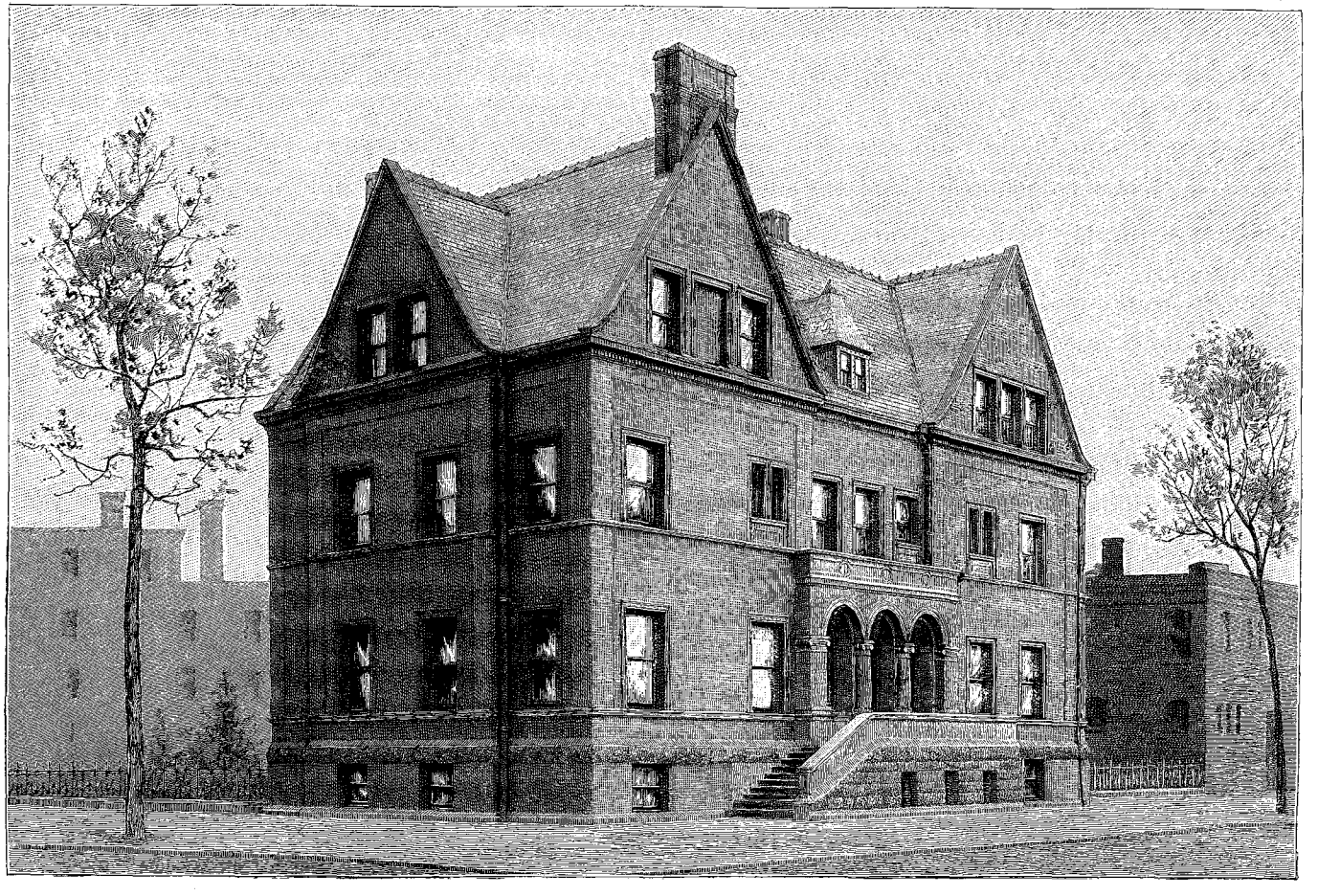
Both Cincinnati and St. Louis are cities where, although summer weather is very hot, very cold weather is frequently experienced in winter. It seems strange, therefore, that a house plan [No. 1] should be so largely used as that which is published on page 425; and yet, with all the inconvenience attached to the absence of a hallway leading to the rear bed-rooms, this plan is very common in both cities.

House in Bellevue Place, Chicago, Ill.

These cities, with Louisville, have architectural traditions and histories extending back, as we have said, much farther than other Western cities, but they seldom present objects of interest for the purpose of this paper, as they are, in the main, in direct sympathy with, or direct copies of, Eastern work, and present few aspects of local or typical interest. To these there are a few exceptions. In Cincinnati there is an old one-story dwelling, built in strongly defined Colonial feeling, which is so elegant in its proportions and details, so refined in its entire expression, that it is worth a pilgrimage to see. The Grecian columns of the portico, with their strongly accented entases, and the general treatment of cornice and window architraves, is strongly suggestive of many of the old houses about New Bedford and Newburyport. The house is unfortunately so embowered in trees that a photograph of a representative kind was impossible; although, in truth, to take a photograph of such a house would seem almost as impertinent as to insult a fine old maid by capturing her picture with a "Kodak" without her knowledge.

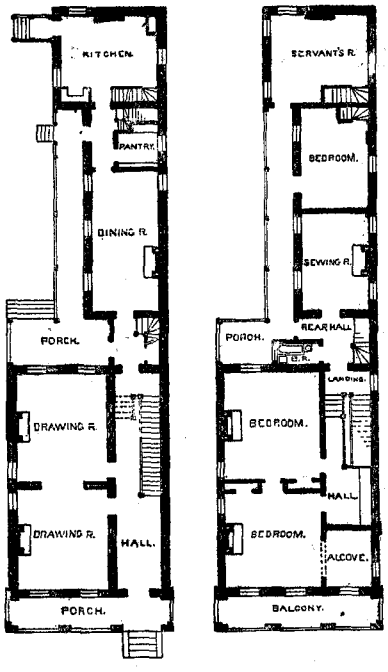
St. Louis, also, has in several of the older streets (Lucas Place, for instance) two or three old dwellings of interest. Two I recall, built of buff limestone, which have with age

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



House in North State Street, Chicago, Ill.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Plan No. 1.

turned into a lovely scheme of color, varying from delicate old ivory to a rich "meerschaum brown;" and the entire surface of the stone is encrusted with delicate lichen and other vegetable growth, as beautifully and minutely traced as are the needles of ice first formed on still water.

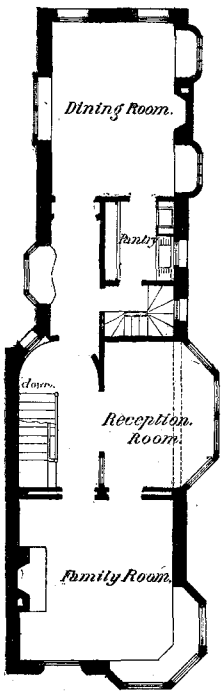
Chicago possessed a few interesting souvenirs of its early history; but these, alas! went with the great fire of 1871; and scarcely a remnant remains; and of these few not one has been spared by the irreverent hand of progress.

From the early and meagre architectural development of this and other Western cities the present state is vastly removed. Indeed, modern Western dwellings seem to have scarcely a visible trace of relationship to these earlier types. First, let it be noted that there is in Western cities a notable absence, compared with cities in the East, of houses built in blocks. The reason for this is obvious. Eastern cities being older, were begun and their traditions established at a time when their citizens were more interdependent, and facilities for transportation were less complete than now. For this reason they are not only more compactly built, but ground has become dearer than in the West. The reverse is true of Western cities, and the result is that residences much more frequently occupy considerable space, being entirely detached from other houses and surrounded by their own trees and lawns. It will frequently happen that a citizen imbued with characteristic and full confidence in the future growth of his city will purchase a large tract slightly removed from the business centre, upon which he will build his home, knowing that but a short time will elapse before it will be embraced by the city itself. When this occurs, he subdivides and sells what he does not need, reserving an acre or two for his own purposes. The frequency of this kind of thing gives Western dwellings a general suburban aspect, removing them from the class of city houses to which we may have become accustomed. This suburban effect is also enhanced by the extraordinary increase in the variety of building materials, which, coupled with the characteristic Western love of novelty, often leads to the erection of houses as different in material, color, and treatment as is possible to conceive, different dwellings in the same street being as independent of each other—often as apparently hostile as if separated by wide stretches of open country.

Nevertheless, many streets thus built up present a superb air of space, comfort, and even luxury. In driving through these streets the eye is at no time wearied with the monotony which is so tiresome in Fifth Avenue or other similar streets in Eastern cities, but is everywhere delighted with constant change, constant appeal to new sentiment, and that delightful sense of the picturesque which, to the stranger, is so inspiriting. Notable among such streets are Euclid Avenue in Cleveland, where the splendid residences which line it are often set back as much as two or three hundred feet from the street; Michigan Boulevard and the Lake Shore drive in Chicago, superbly paved streets with great variety of interesting outlook; Prospect and Grand

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Avenues in Milwaukee, the first overlooking the lake from a bluff one hundred feet high, the second a magnificently wooded avenue two hundred feet wide; and several avenues in St. Paul, Minneapolis, and other cities. Occasionally these streets are laid out parkwise, still further accenting this suburban aspect. Such are to be found in St. Louis, in Van Deventer Place; in Cincinnati, in Walnut Hills and Clifton, where, with winding roadways and magnificent trees, all the beauty of the country is brought into immediate contact with city life. This rusticity is by no means universal, but it is so common as to give a distinct quality to Western cities, and by contrast to impress one, in older towns, like Cincinnati and St. Louis, with a certain Eastern flavor, when passing through their old, solidly and uniformly built-up portions.



Plan No. 2.

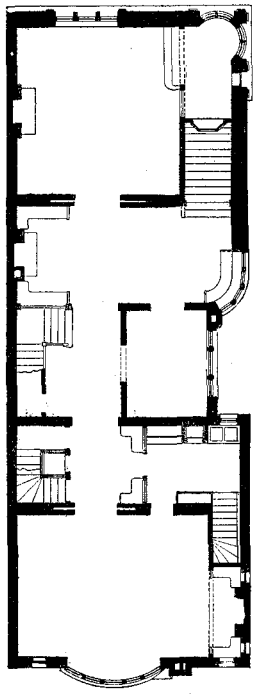
Even where dwellings occur solidly built into blocks there is an equally distinctive effect produced by means in some ways identical with those used in detached houses. The great variety of building material accessible, freely and indiscriminately employed in a block of residences, produces at times an effect most bizarre and startling. Such blocks attain their most flamboyant expression —if "all which flams is flamboyant"— in the large number of dwellings built by real-estate speculators for sale. The inducement in Western cities to erect such houses, because of the wonderful increase in real-estate values, is very great; while the temptation to catch the eye of the possible purchaser by unknown and unheard-of novelty is to the builder irresistible. The result is that in a block constructed with this end in view, one house may be of red sandstone, the next of gray, the next of green, and so on. Meanwhile, each house has its own bays of copper; its own cornice, turrets, and other "fixings" of galvanized iron; its own carved panels of terra-cotta; which, with bands of pressed brick, porches of wood, aprons, roofs, and "rooflets" of slate and tiles, make up an *olla podrida* most trying to even the sturdiest of stomachs.

Against such barbarism a wholesome reaction has set in, and nowhere may simpler and more honestly built dwellings be found than many now erected and erecting in the West. It may be prophesied with certainty that, as a result of the architectural movement now in progress, Western cities like Chicago, St. Louis, Kansas City, Minneapolis, Milwaukee, and many others will, within a short time, present streets unrivalled in the world for the variety, picturesqueness, and beauty of their domestic architecture.

In this sketch no reference is made to very costly dwellings. These are not apt to be illustrative of popular taste so much as to be the representative of the personal taste and whim of the owner or architect, striving to impress itself by splendor or idiosyncrasy upon those passers-by who might otherwise be indifferent or untouched. The illustrations chosen are from houses of moderate expense, costing from ten to forty thousand dollars.

Perhaps, since the interior plan of the house is its vital part, from which everything else grows, it may be well to give a few representative plans which have been developed in Western houses. In the growth of the house-plan from the earlier types the first great change began with the hall. This, originally a narrow passage, of no service for living and with few possibilities for decorative treatment, has been expanded, and made of practical value in several ways, becoming not only a large and picturesque room of itself, but serving admirably as a general reception-room or *rendezvous* for family and guests. Sometimes this reception-room is placed upon the street level, in other cases it is

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Plan No. 3.

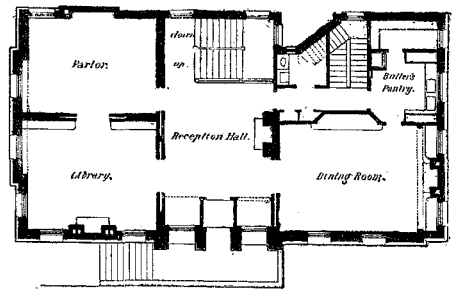
raised above the street by a number of steps, which may be placed either within the front entrance or without it, as in the case of old-fashioned "stoops." In small houses the first arrangement presents obvious advantages (see Plans 2 and 3). The reception-hall is here convenient to the street, offering that immediate shelter to the guest which in rough weather is so desirable, and the opportunity to adjust himself before meeting the host or other guests who may have already arrived. The hall's remoteness from the main or living portion of the house saves those within from the noise and draughts incident to the opening of the hall-door. This arrangement also leaves the living story in much more available shape, especially in the front room, which may be extended the full width of the house.

Of these plans, that marked No. 2 is simpler than No. 3, but less picturesque. In Plan 2 the reception-hall has a fireplace of brick, and oak floor and oak panelled ceiling; a toilet-room opens from it, and coat closet. The room is bright and cosy, presenting a cheerful and reassuring aspect to the stranger and a homelike welcome to the owner.

Plan 3 is very ingenious and picturesque. The entrance proper is from a loggia, which may be inclosed in winter, and in this plan less stress is placed upon the reception-room in the *rez-de-chaussée* than in Plan 2. The hall is on the principal floor, and gives a very picturesque view of the stairs and the other rooms about it. Its disadvantage is in the fact that it offers no seclusion to guests arriving at a reception and before removing their wraps — a criticism almost equally true of Plans 4 and 5.

The hall in Plan 4 is simple and obvious, presenting many advantages of convenience and beauty. The inconvenient location of the stairs, in case of receptions, has been, in another house of similar plan, removed by enlarging the hall somewhat and placing the stairs to the left of the entrance, doing away with the two alcoves. Wide windows upon the stair-landing between the first and second stairs, together with groups of windows in the opposite or north wall, give adequate light to the hall. In this house the mantel is made more monumental in design, and is placed nearly opposite the entrance.

The hall in Plan 5 is very effective. The first stair-landing is placed at the intersection of the three axes of the adjacent rooms, so as to be equally visible from each of them, and to present a very picturesque glimpse of each of them,



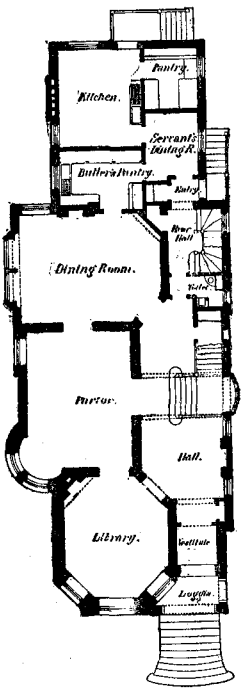
Plan No. 4.

and by this means some very charming effects are obtained. It will be seen that two of the rooms present a view in perspective, so that the front and sides of all large pieces of furniture are equally

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

seen, producing an effect somewhat unusual in the arrangement of dwellings.

In the growth of their plans Western city houses have tended also toward greater enlargement and importance of the living and dining-rooms, at the expense of the parlor and reception-rooms. Of course, reference is made to houses of moderate cost. The old fashion, in which the largest and brightest rooms were reserved for occasional guests,



Plan No. 5.

while the family lived in small and ill-lighted apartments, seems happily over, and now the brightest rooms, containing the most picturesque street aspects, will generally be found to be rooms of commonest use. The few plans here illustrated suggest this idea. For instance, the front rooms in Plans 2 and 3 are living-rooms, and the parlors or reception-rooms are the small, less desirable rooms in the centre of the house. The library, or living-room, in Plan 5 is the octagonal room giving a view upon the street; and Plan 4 would be improved, from the average Western stand-point, were the library made larger and the drawing-room smaller. The words "library" and "living-room" are made interchangeable, because in general the library is the living-room, which, being thus made much larger than other rooms, admits of treatment much freer and broader than they. Its wealth of books and pictures, *bric-à-brac*, portfolios; its roomy tables and easy-chairs, its generous, wide-throated fireplace, the general air of profusion and informality, revealing something of the true character of the occupant to be brought into intimate contact with, which is so delightful to the guest—all make this the attractive room of the house. Here is the focus of family gatherings, the inspiration of wit and good fellowship, and the opportunity fully to express the true character of family tastes and accomplishments.

The dining-room has also greatly gained in dignity and importance, its size, shape, aspect, the reception of the morning sunshine, its coloring and entire sentiment are all carefully considered.

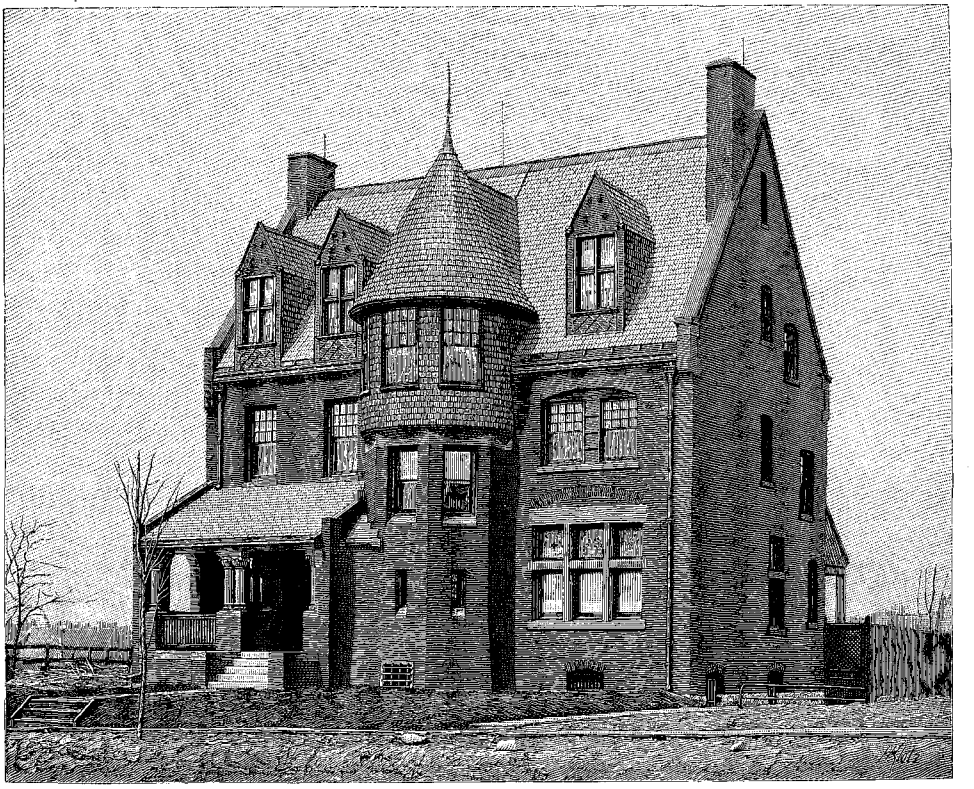
One feature in the plans of Western city dwellings must be very clearly defined. This is their openness. Not only are windows upon the average larger than in the East, but they are more frequent, as are also bay-windows, oriels, etc.; while in the general plan rooms are more closely related, openings between rooms wider, and single swinging-doors less frequent. Several dwellings in Chicago—and there are many in other Western cities—have no doors whatever in the first story, except those at the entrance and between the dining-room and butler's pantry, curtains being exclusively used. This is certainly carrying out the idea of openness to the extreme, as it is the destruction of all privacy, and of all those suggestive glimpses upon which so much of the artistic effect of a house depends.

A small room has intruded itself upon many Western city houses, which should be lamented equally by the occupant and the architect. This is a kind of office or den, where the master of the house keeps a desk and a few facilities for the transaction of business after hours are over in which business should be transacted; for in the enormous pressure of events about him the Western

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

man, perhaps even more than his brother in the East, is compelled in the evenings to carry something of his business across the threshold of his house.

said of Richardson that a very valuable client gave him commission to build for him a house more or less ideal, the ideally-ideal feature of which was to be



House in St. Louis, Mo.

As in the East, that chief minister to the ethical side of the family life, the fireplace, has steadily grown in beauty and dignity, until now it has regained something of the supremacy from which it was threatened with dethronement when first the source of heat and comfort was inaugurated in the shape of a black hole in the floor. It is now apt to be most generous in size, wide enough for a good back log, and richly adorned with marbles or tiles, equipped with carefully designed fire-dogs, fenders, and screens. These fireplaces have become things of service as well as things of beauty. Woe betide the hapless architect who builds them in such fashion that the smoke goes the wrong way. No felicitous retort may save him; no soft answer can turn away wrath. It is a grand, guaranteed-not-to-smoke dining-room fireplace. All architects will at once guess that this fireplace performed prodigies in the way of smoking out the inhabitants. At the housewarming dinner, at which Richardson was present, every eye had wept scalding tears because of it. After the dinner the host turned to Richardson and said, with great suavity, "Your fireplace smokes, you see;" and Richardson said, "Yes, I see it does; but don't you like it?"

Take the subject of Western city house plans altogether, it will be found that from 1874 to within a few years back there was a tendency toward all sorts of ingenious arrangements producing odd and startling effects; but since then a reaction has set in toward simpler and

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

more practical plans, in which space, light, and utility supplant mere eccentricity.

Viewed from without, many interesting developments will be noticed.

Of course the West took "the Queen Anne" fever with alarming intensity. It was just at the tender age when the constitution is most sensitive to such infantile diseases, and during its prevalence eruptions of all sorts came out in the most extraordinary way. But the youth of the patient was in its favor and the fever fortunately passed away, and now manifests itself in only a few cases, such as were mentioned earlier in this article. H. H. Richardson was one of the most efficient physicians in working the cure, for under his influence such architects as had been following Norman Shaw (blindly and ignorantly, as they had followed him) turned from him and began to follow the American. The results have been in many cases very happy, although in others they have resulted more or less disastrously. Richardson's influence has always tended to make architecture more simple and direct, and it has led architects more generally to avoid the hideous mass of shams which in America preceded him. Among results upon the whole fortunate is the use of quarry-faced stone in Western dwellings. The extent to which this has been done in nearly every Western city is extraordinary, and so accustomed to stone in this shape have people become that they often seem unable to realize that cut stone has at times greater artistic value. Many dwellings constructed in this rough material have an exceeding heavy and forbidding look, arising in large part because in them stone has been employed in blocks too large for the scale of the building, or because granite has been used whose cleavage has left too strongly projecting and rugged surfaces. This was a mistake which Richardson, in the few Western houses he has designed, has avoided; his fine sense of scale saving him from such an error. Still it must be confessed that, because of the great vigor and masculinity of his genius, he was generally more successful in monumental buildings than in smaller dwellings. His blind followers have often failed where he succeeded, because they were denied his finer sense.

Successful dwellings constructed of this material are, as might be inferred, generally very simple in detail; few mouldings are used either at window-jambs or elsewhere; even arches are sparingly employed, and carving is applied very temperately. In the more frequent examples the general effect is simple, dignified, and satisfactory. The main entrance is in nearly every case the centre of the entire composition, and the place upon which is bestowed greatest enrichment. One of the most satisfactory of these dwellings is illustrated on page 418. This is built of a reddish-brown sandstone, slightly mottled with gray, and having a cleavage not too rounded for satisfactory wall surfaces. The general composition of the building is very good, and the doorway is recessed within a well-sheltered loggia. The general mass and color of the building is altogether pleasing.

Among the abuses arising from the use of quarry-faced stone it may be well to mention what seems to be a peculiarly Western institution, the quarry-faced column. This is built of blocks of rough stone piled upon each other, and is the most distressing architectural plague since the plagues of the other sort in Egypt. The stone surfaces never come in line with each other, the column, therefore, never seems straight, and the joints, being all recessed, give it the effect of a soft bag banded with strings. As an ideal expression, therefore, of absolute instability it is among all architectural forms unrivalled.

Cut stone has been employed comparatively seldom in the West since the earlier days when ashlar was largely used which had been put upon a rubbing-bed and brought to a perfectly smooth surface. The use of stone in more vigorous expression has almost entirely taken its place. The rougher dressing of stone occurs in comparatively few cases. This is perhaps partly a matter of expense and partly the result of an ephemeral taste which may change.

Brick and terra-cotta are more largely

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

employed than stone work in nearly every Western city, and both are manufactured in variety practically without limit. Bricks of every conceivable color may be found, and terra-cotta to harmonize with them. I have seen bricks manufactured in the West having the exact effect of green mosses, or the various tones given by small flowers and lichens adhering to stone, or else having surfaces black and burnished with metallic lustres.

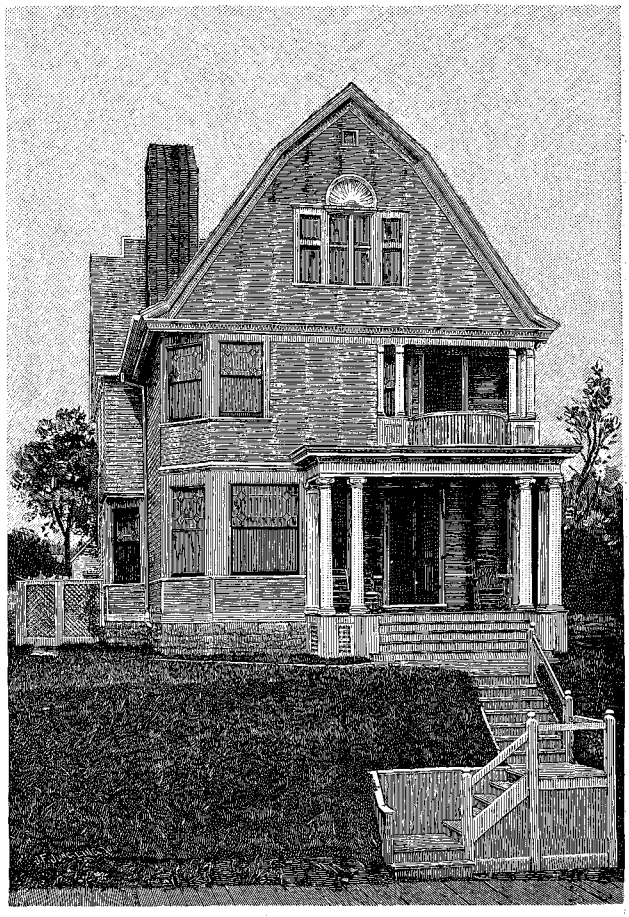
Such material as this opens out possibilities for color treatment such as had not been dreamed of, which will doubtless be productive of many startling and distressing effects before architects shall have obtained the entire mastery of this nicest of all arts, the art of color. Such materials have contributed largely to the dwelling-house development of the West.

The Dearborn Avenue house, illustrated on page 421, is built of brick and terra-cotta in very satisfactory dull red. All the details of this house are modelled with singular crispness and vigor, and the fine rococo sentiment is carefully preserved. This is one of the best houses, in many ways, designed for a position within a continuous block, in Chicago.

The State Street dwelling, on page 424, is built of Roman bricks of deep brown, with lines of red running through them, and the terra-cotta is made in the same general coloring. The entire effect of the wall is very satisfactory in possessing a singular bloom of color entirely different and much richer than if each brick in the wall had been in one tone. This house has a very strong Colonial feeling, without in any way servilely following the Colonial type.

Bricks are used in the Prairie Avenue house, page 417, which are made of fire-clay burnt to vitrification. Their colors are warm golden browns, with very considerable variety, the surface being slightly rough. A more pleasing wall it will be difficult to conceive, and the bricks so burned have the rare advantage of being impervious to water and frost, and of maintaining their color and quality intact for an indefinite period of time. This dwelling illustrates the growth of an English feeling similar to that shown in some of the new London houses in Cadogan Square, Harrington Gardens, and elsewhere.

The Bellevue Place house [p. 423] is built, in the first story, of reddish-brown rough-faced brick.



House in Minneapolis, Minn.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It will be observed that in the West, as in the East, the roof seems to have come to stay. Its frank expression, and its free use as a most important element in design is everywhere seen. This is most promising for city architecture, where nothing so much adds to the interest of street vistas as outlines of high-pitched and well-modelled roofs.

Especial attention is called to the St. Louis dwelling on page 429. This is of such unusual picturesqueness, and is so simple and direct in design as to be thoroughly charming. Nothing in the exterior design is adventitious; the design grows naturally out of the plan. Notice the quaint dignity of the whole, and think how delightful would be the aspect of our cities if such dwellings as this, with their varied outlines of roof and tower and dormer, the strong individuality and harmonious coloring were more frequent. This dwelling also illustrates how largely suburban in aspect a true city house may be.

The few wooden dwellings which are illustrated show that not yet have they been banished from Western cities; ultimately they will be confined to the suburbs or the country, but at present they often form agreeable variations to the general street aspect. In certain examples they show that the influence of the neo-Colonial has passed to even the distant West, and if it has not always reached its point of greatest refinement, it still shows a vigor of thought and handling. The Milwaukee dwelling [p. 422] presents some novel and pleasing features, especially in the use of the stucco frieze and in the management of the gables.

San Francisco has had a very unusual architectural experience; it has been more isolated from the rest of the country than almost any other of our cities; its development, therefore, has been more peculiarly its own, and has been less modified by contemporaneous work in Eastern cities. It is only of very late years that work being done in the East has strongly modified the feeling of San Francisco architects. The fear of earthquakes has caused nearly every dwelling-house to be constructed of wood. In spite of this fact, little seems to have been done, as might have been expected, toward developing an architecture of wood. All sorts of architectural styles, originating in stone, have been adopted bodily in wood, with scarcely a change in the original stone expression except such as is absolutely necessary for the jointing of a different material. California and other parts of the Pacific coast are blessed, in so far as their wood houses are concerned, in their beautiful red-wood. This is a lovely color for interior, as well as exterior work. Its effect, when used outside in shingles and otherwise, and treated with spar varnish, is singularly fine, presenting to the eye a fine leathery texture. This wood is not difficult to work, and when used with intelligence and discretion should be made to contribute, to a great degree, in the development of new forms of design in wood.

The houses mentioned above, like all typical Western dwellings, are better finished within than their exterior would seem to indicate. The reverse of this is seldom true, and this is a good deal to say for the certain honesty in Western cities, where the occupant of the house is less interested in making a specious display to his neighbors than in acquiring a solid and enduring comfort for himself. Native hard-woods are freely used, especially white and red oak, both quartered and plain. These woods have been especially popular; their beautiful grain and open texture lend themselves to so many effects of color that they have taken the place of other wood, the color required being imparted to them by filling and staining; indeed, their use has become so general that the supply threatens to be exhausted, and their market value has increased during the last few years nearly double. From California come several beautiful —if rather showy — woods, in yellows and reds. The manilla-wood from the coast has much of the beauty of mahogany, with its deep red tones and waving grain. Curiously enough, when we have practically abandoned in the West the use of American black walnut, which at one time was employed far more than any other native hard-wood, and are now beginning to use so freely the English oak, the very "swell thing" in England seems to be to abandon the use of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

their beautiful oak and substitute instead our American black walnut.

Much more may be said of the interior aspect of these Western dwellings, which is as varied as their exterior designs, or as the temperament and social position and disposition of the occupant.

Again let me say, that between the character of the occupant and the general expression of the dwelling there is much greater similarity than in any other part of the country. The one is much less governed by artificial conditions than his brother in the East, and very much more freely expresses himself.

A few years back, and contemporaneous with the reign of, first, the "Victorian Gothic" and afterward the "Queen Anne," was the reign of marvellous wall-paper, portières, *bric-à-brac*, and Eastlake furniture. To all of these the West gave swift obedience. Houses may still be found in abundance where each of these sovereigns holds divided sway; but in the main common-sense has won the day, or at least other and less artificial fads now rule. First the embroidered, carved, painted, cast and wrought iron crane, who so long stood on one leg amid surrounding cat-tails, has died; the death was prolonged and painful, but seems finally to have occurred. After this the famous, honestly constructed, glued-on, mortice-and-tenon furniture fell to pieces and went to the cellar; then, as intelligence increased, the people began to purchase pictures of interest and beauty, and ceased to paste pictures of no interest and beauty on their walls and ceilings. After this came a yearning for more sunlight and fresh air, and heavy stuffs were largely removed from doorways and windows, and lighter materials substituted. Last of all, the indiscriminate vase and plaque, the ubiquitous display of cups and saucers, have given way to temperateness in this as in other things. Even "stained" glass, which in the West has for many years run a most shameless career, has grown less wild and uncivilized, exchanging its barbaric hues for gentler whites and opals.

Take it altogether, the outlook for Western city houses seems most promising. Western people themselves are becoming, and will still more become, almost ideal clients. It is true that, as in the East, Western city dwellings have not escaped the deadly touch of the "know-it-all" client, nor of the man who is "building the house to suit himself," nor of him who "is going to live inside the house, not outside," and who is therefore loftily indifferent to the street aspect of his house; but each, even the last person, is becoming infrequent. In the past, and to some degree at present, Western cities have been and are influenced by men whose lives have been absorbed by things too material to leave them much leisure for art; but even in the case of such men there is a marked indisposition to dictate in directions where their knowledge is incomplete. They have a large openness and unbiased attitude of mind, and a genuine and earnest desire to "get the best." In the West is less often found than in the East the "æsthetic crank," and it is also true that life in the West is less conventional, freer, less restrained by artificial restrictions than in older communities, and the true nature of people and things is perhaps more frankly expressed.

All of these conditions are helps to the architect, for while they free him from such artificialities as might tend to hamper him, or to make his work more formal, they give wholesome impetus to honest and earnest endeavor.

Circumstances are also such that the architect may act with great catholicity. Architectural tradition in the West there is none. Even from such practices as may exist in the East the West will often hesitate to borrow; and among the various Western cities marked tendencies toward divergence not only from the East, but among themselves, may be noted. Thus contemporaneous work in St. Paul and Minneapolis will differ in a marked degree from similar work in Omaha or Denver; and the dwelling-houses now erected in Chicago have marked peculiarities not to be found in other cities. These variations are due to great differences of climate and customs, as well as to differences of temperament among both clients and architects, for the enormous size of "the West" must be borne in mind when

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

considering this great architectural development.

Among these various rival cities dominant fads in architecture are likely to become less common, and problems will be more generally determined by the nature of the case.

The rivalry among these cities is a most important factor in the growth of domestic as well as commercial architecture. In cases like St. Paul and Minneapolis, every move of either city is watched by the other with keenest interest, and every structure of importance erected in one city becomes only the standard to be passed by the other; so that not only is it their ambition to excel in matters of population and wealth, but also in the splendor and prominence of their architectural movement. It is similar with individuals. Men who in many cases began their careers at the same time, who perhaps came from the same Eastern State, who have together succeeded in careers which seem but integral parts of the great developments about them, have with each other a very earnest but generous emulation, and exercise a careful scrutiny each of the action of the other, not only of his attitude and actions toward the social world but toward the world of art; and the result will inevitably be the growth of better and more wholesome art feeling.

In the beginning instance this desire to surpass begot much of the meretriciousness and display of architectural gewgaws.

This, however, exists no longer. No men travel so much as Westerners. The distance from St. Paul to Boston is less than one-fourth the distance from Boston to St. Paul; San Francisco men drop into Chicago as lightly as a Baltimore man would into New York, and every one of these men knows something about architecture. Indeed, with the intimacy enforced upon him with all forms of building operations, he could not remain ignorant if he chose. Wherever he goes, therefore, his eyes are wide open, and he will in the frankest way express opinions on So-and-So's dwelling in cities far East, often in Berlin or Vienna, at the same time compare them with dwellings more familiar to him and nearer home. Such conditions are certainly significant, and architecture growing up among them cannot fail to be vital.

That this Western architecture is vital cannot be denied. With all its crudity begotten of ignorance, but more often begotten of haste, domestic architecture in the West is certainly vigorous; there can be no question of its insistence upon the right to live. And with this vitality there will not be wanting material with which to work. Not a day passes in the office of any architect of active practice but specimens are brought in of new granite quarried in Wisconsin, new sandstones from Michigan, ricolites from Mexico, verd-antique jaspers and rich marbles from Colorado to California. There is an equally steady current of new processes for art metal-work in bronze and iron, of mosaics in glass and marble, of rich wall-coverings in leather, stuffs, and even stamped wood-pulp, and in new forms of beautiful encaustic materials.

The forces employed in producing every sort of material intended for use in constructing and adorning buildings, especially dwelling-houses, seems infinite. These various things the greater adventure and love of novelty in the West will more freely use than will the East, with consequences both for better and worse. But disastrous experiments remain isolated, since nothing is truer than the general sterility of bad art ventures; the successful efforts will remain and multiply.

With a wholesome quality of mind and life in the layman, and with imagination and discrimination in the architect, what may not our domestic architects become? In twenty years this will be the richest and most luxurious country ever known upon the globe. Shall all of these treasures of nature and of art, all of these fostering environments, result in architecture splendid in material conditions alone, like that of later Rome, or shall it be chiefly distinguished, with all its splendor, by the earnestness, vigor, and thoughtfulness which inspire the whole?

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

OLD AGE.

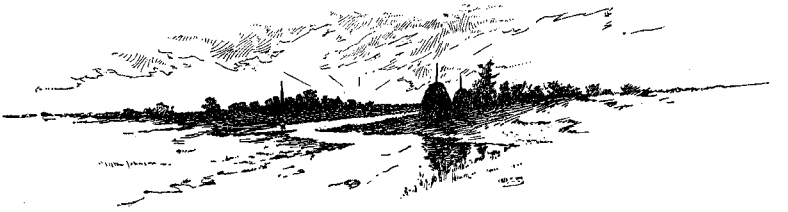
By C. P. Cranch.

I.

Soon—but by gradual steps across the blue
The regal sun will steal from east to west,
And veil in clouded gold his flaming crest,
With all his fiery plumage drenched in dew.
Soon will the leaves of summer change their hue
And flutter down to earth's all-hiding breast;
And silent birds forsake their wind-swept nest
For distant climes and fields and woodlands new.
So, year by year, from youth's brave morn and noon
Life cools into its sunset unawares.
And looking back across the long, long days
Eastward, where rose our sun, a spectral moon
Peeps through uncertain clouds, or dumbly stares
Upon an unknown grave in twilight haze.

II.

This were a boon all others far excelling,
Could we attain that faith so near yet far,
In the deep inner world, where nought can jar
The steadfast house and home, our chosen dwelling,
Or check the immortal fountain there upwelling.
And happy they to whom the gods unbar
The gates of night to greet their evening star
Ere vesper chimes are changed to funeral knelling.
Ye fellow-lingerers in the twilight gloom—
Ye who with me have lived through morning's glow,
And down life's darkening slopes have trod together—
This greeting take—this trust; that not to doom
But victory bound, our lives are pledged to know
Another morn in Heaven's unclouded weather.



PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

AUTUMN SONG.

By Duncan Campbell Scott.

Sing me a song of the autumn clear,
With the mellow days and the ruddy eves;
Sing me a song of the ending year,
With the piled-up sheaves.

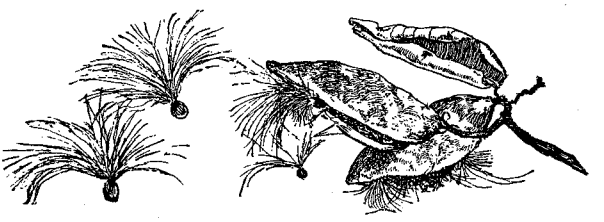
Sing me a song of the apple-bowers,
Of the great grapes the vine-field yields,
Of the ripe peaches bright as flowers,
And the rich hop-fields.

Sing me a song of the fallen mast,
Of the sharp odor the pomace sheds,
Of the purple beets left last
In the garden-beds.

Sing me a song of the toiling bees,
Of the long flight and the honey won,
Of the white hives under the apple-trees,
In the hazy sun.

Sing me a song of the thyme and the sage,
Of sweet-marjoram in the garden gray,
Where goes my love Armitage
Pulling the summer savory.

Sing me a song of the red deep,
The long glow the sun leaves,
Of the swallows taking a last sleep
In the barn eaves.



PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

JERRY.

PART SECOND (CONTINUED).

CHAPTER IX.

"We pant, we strain like birds against the wires;
Are sick to reach the vast and the beyond;—
And what avails, if still to our desires
Those far-off gulfs respond?"

"Contentment comes therefore; still, there lies
An outer distance when the first is hailed,
And still forever yawns before our eyes
An *utmost*—that is veiled."

JERRY was glad that he had the fire to make and the supper to cook, for this every-day work brought him back to a realization of his position and of all he owed Joe, for whom he now had a much higher respect than for either himself or the doctor.

The corn-bread was assuming a most approved brown tint; the bacon was crisping and curling; the coffee was bubbling and muttering in the pot, sending out a grateful fragrance. Homely, coarse fare, and Jerry knew it. He had read of the banquets and feasts of ages gone, and had read modern novels about the many alluring ways of feeding people which fashion invents and money pays for. He had read it all with a sort of scorn at first, but later with a changed feeling that grew to be a longing to see the sights and hear the beautiful sounds of music and laughter that must fill in these pictures. And lovely women; he had read of them too, and paused a moment as he turned the bread that was browned on one side; how would they look? He had never seen one save once when he was alone in the doctor's study, and before him on the table lay a case, a red morocco case. It was different in shape from any he had ever seen before, and what could it contain? It did not occur to him that there was any wrong in opening it, and he unhooked the clasp without one tremor of his honest boyish heart.

A sweet, fair face, that was more delicate than any he had ever seen; he did not know if it were beautiful, for he had no standard; he had never seen any faces since he could remember, save those of the work-hardened, slovenly drudges about the towns where he lived; but there was something in the picture that held him. It looked so small and fine, like some of the flowers he had seen among the rocks, but had never picked because somehow he knew that one touch would kill them.

The eyes met his with an expression as if they once had pleaded for protection, but afterward had learned a look of bravery; and the mouth was pained.

"Poor little thing," he had said, and had sighed as if he knew the sorrow that looked from her eyes. He felt that he would have spent his life in saving her from ill!

Of course he was a fool, and that face was only a picture, maybe of the doctor's mother or grandmother who had died long ago.

Poor woman!

Then he shut the case; a new thought had flashed on him; maybe this face had been the one face that the world had held for the doctor? And had she died? and so he had come out to waste his life on the people. Was this the secret of that life?

But the memory of that face never left Jerry entirely, and it became the nucleus about which all his youthful dreams grouped themselves. If he could only know a face like that; could only move in a world where such refinement was common. Paul could, but he could

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

not; could not until he made a golden key.

He turned the bread carefully while he pondered on the discontent that had culminated so suddenly in his heart. If the doctor had not turned from him he would have been satisfied always with the old life; but now all was changed and he was filled with a restless ambition and jealousy; feelings which he fully recognized, and a year ago would have despised. Now he must rise—if it took a lifetime to mount one step!

Perhaps when he was an old man he would see such faces about him. When his eyes were too dim to see almost, and his ears too dull to hear, and his heart too weary to love, then all these things would come to him!

"Well," and Joe stood in the doorway.

"How are you?" Jerry answered, and turned to the table.

"Thar's a paper," and Joe laid the printed sheet down, "it cusses youuns wuss an' wusser; durned if I'd stan' it."

Jerry put the paper on the shelf.

"I will have my say some time," he answered.

"An' Dave Morris says as youuns is welcome to the paper when youuns wants it."

"Dave Morris?"

"Thet's what I said," sitting down near the table.

"You have been there to-day?"

"I hev."

Jerry poured out the coffee in silence; questioning was not customary between them, and what else there was to be told must await Joe's pleasure. The supper was over and the few things washed and put away; then Jerry lighted the lamp and took up the newspaper, and Joe filled his pipe.

Truly, as Joe said, the abuse and misrepresentations seemed to culminate in this paper. There was nothing too false to be said—nothing too wild to be predicted; and at the end a comment by the far-off city editor, that many of the idle and worthless in the city were coming out to throw in their lots with the "redoubtable Jeremiah P. Wilkerson." Jerry read it over again—"the idle and worthless," the paper said: what should he do with them? His heart sank within him. The little ball he had set rolling was taking such appalling proportions.

"Dave Morris says as youuns is the peskyist varmint as ever he's knowed," Joe broke in, taking his pipe from his mouth, "an' I says, says I, 'Dave, Jerry'll kill youuns 'thout thinkin',' says I," and Joe chuckled contentedly to himself.

This described his ideal hero, a man who "killed without thinking," and that Jerry should hold this proud position, and hold it in the estimation of the man who harried all Eureka, was to him an infinite satisfaction.

Jerry put down the paper; he was anxious to know of Joe's interview with Dave Morris.

"Morris came to see me to-day," he said.

"An' come back mashed jest as flat!" Joe answered, with a readiness that showed his pleasure. "An' I axes him, 'Dave, did youuns skeer Jerry?' Lord!" slapping his leg, "youuns jest oughter seen him, Jerry; I 'llow he'd a-liked to eat me jest whole, he would; says he, 'Joe Gilliam, youuns aint got but one hide,' says he, cussin' awful, 'an' if youuns keeps on a-pesterin' me I'll jest use it up,' says he."

"And you?" Jerry asked.

"I jest knocked him down," pleasantly, "I gin him a eye thet'll not look purty fur a while," and Joe chuckled a little—"but I tole him as a rotten apple were mighty good fur it." Then Joe returned to his pipe.

He had gone to Dave Morris's shop to intimidate him, and had succeeded in doing not only this, but in addition had knocked the man down. This had been his day's work, and he had been happy in it; Jerry had knocked Dave Morris down one day, and he, the next; what more could Eureka need to prove to her that these men from the Durden's side were superior?

Knowing the people, Joe knew that his and Jerry's reputations were made now; and that no man in either town would touch them without much thought and calculation as to the consequences.

It was a happy feeling that came over Joe; a calm assurance that he had done his duty by Jerry, and at the same time had won renown in Eureka. Surely a good day's work.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Then Jerry looked up suddenly.

"Who owns Durden's Mine?" he asked.

The fire still threw its quaint shadows; the lamp still burned with unwavering brightness; it must have been Joe's eyes that flickered and winced until the room seemed dark—flickered for a moment so that he could not see the face of the younger man—and when he spoke his voice had changed.

"Durden's Mine?" he repeated—"Durden's Mine? I dunno fur rayly."

So Jerry *had* heard what he had said by mistake the other night.

And Jerry took the shade from off the lamp, and looked at the wick as if something ailed the light. "I thought you would know," Jerry said, slowly, while many surmises as to Joe's words flashed through his mind unbidden—"and that you would tell me about it; for if I know who owns it, and can find out from the owner its value, I can the more easily persuade the people to buy land in Durden's."

"An' open the mine agin?" was questioned in a lowered voice as of one in fear of some catastrophe.

"Of course that would be the plan," raising the paper again between him and Joe, "that, or find gold somewhere else near at hand; I suppose it lies all about here."

He had not looked at Joe since he asked the question about the ownership of the mine, and now went back to a pretence of reading in order to be able to collect his thoughts and reason them free from his suspicions.

And Joe sat still with his pipe going out, and his eyes fixed blankly on the fire.

It had been many a long year—many a long year since he had been warned that some bad end would come; many a long year since he had been pleaded with to come away and let the place alone; many a year.

He glanced furtively at the corner where the dog Buck lay sleeping; then vaguely up along the rafters; then back again into the leaping fire that, even though it was August, did not seem able to warm him now.

The Devil had made gold, she had said; God had never made that thing that ran men crazy; the awful gold that shone in their eyes until they could see nothing else. And she had made him bury her in a place where there was no mark of gold; no trace of the kind of rock that held it, else somebody would come some day and dig her up to hunt for gold, and she and the baby wanted to rest. And gold would break his heart some day, she said: would it?

It was very long ago since his "little Nan" had warned him—very long ago, but dead people surely came back—surely! And he knew the path so well, and every rock by the way; and everything was so convenient there; his eyes knew the darkness, and his back knew the angles and curves in the rocks; and his lantern, would it burn anywhere else—or his pick break any other stone? And the nuggets;—the little shining nuggets—he had found so many of them washed down by the water that dropped and dropped forever, and that far back in an unknown corner helped to make a stream that flowed away—lost itself. And all that he gathered was for Jerry, all of it; and if others came in all else that would be found should have to be divided.

No, of course there was no gold in Durden's Mine! and he drew his chair nearer the fire.

"Thar's gole in the water thet runs down the mountain," he said at last; and Jerry looked up.

"I suppose there is gold all through that gorge," he answered, "even if the old mine is worn out;" then more slowly, "It is not the mine that I want so much as it is all the land about it."

Joe knocked the ashes out of his pipe and filled it freshly. "I 'llows as it aint lucky, the gittin' of gole," he said; "my Nancy Ann says, says she, 'Joe, don't you tech no sich work,' says she, ''cause I 'llows the devil made gole; God never done no sicher thing as thet,' says she, 'to shine an' shine in a man's eyes tell he can't see nothin' else,' says she—" puffing slowly at his pipe, "an' youuns done hed a warnin', Jerry, a rale warnin'," almost angrily, "an' youuns 'llows thet it's a sin to speckylate in lan', an' is jest a-bein' cussed out 'bout it, an' now youuns is jest a-hankerin' atter it."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Not as a speculation," Jerry answered; "I want it to help those who have been hurt by speculators. I want to give our people who have lived here always, as good a town as these new people expect to have; I want to give them mines to work in that will cause the railway to build a station at Durden's also; I want to give them a good school; I want to make the men more sober and decent, and the women more clean and respectable; I want——"

"To maker fool of yourself, Jerry Wilkerson," Joe struck in, unexpectedly, while the angry color flashed into Jerry's face. "Youuns hes been a-livin' in the doctor's steddy—a-drinkin' books an' papers; an' Durden's an' Eureky's been a-livin' in dirt, an' a-drinkin' whiskey; an' they loves it, yes, jest like youuns loves the books an' the papers, they do; an' lemme tell youuns jest one perticler—if youuns wants to start this po' trash off, youuns'll hev to promise 'em money, an' piles of it; an' if youuns don't give it to 'em, they'll kill youuns in a minute; jest youuns 'member thet!" shaking his head, "orl they wants, or knows 'bout, is whiskey, an' terbackey, an' dirt; they's usen to it — an' born to it — an' likes it. Lord!" taking a puff at his pipe, "an' the wimmins is satisfy 'cause they 'specks to be beat, an' needs it too."

Jerry had turned away, and again had raised the paper before his face.

"I do not agree with you," was all he said when Joe's voice ceased.

"Orl right," and Joe chuckled to himself, "but thar's one thing I'm gettin' to be powerful sure 'bout, an' it's thet the doctor onderstan's these mean critters better'n I 'llowed jest at fust; he do thet."

Jerry moved his feet impatiently.

"It's the Lord's truth," Joe went on; "an' when they've jest plum killed youuns out, they'll stan' squar' up to the doctor an' to Paul, jest youuns watch an' see" — looking anxiously at the paper behind which Jerry hid himself — "'cause the doctor an' Paul jest stomps on 'em 'thout axin' no questions, they do—jest stomps 'em clean out;" then more slowly, "I aint got much larnin', but I knows a pig loves its mudhole, an' a dorg is better fur beatin', an' it aint agoin' to do no good to tuck them things away. They's mad alonger the doctor now, 'cause youuns is done showed 'em thet they's been 'posed on; but they aint agoin' to 'member thet long; an' when they gits to doin' nothin' ceppen steddy 'bout youuns — Lord! youuns'll hanker atter gittin' shed of livin'—you bet!"

"And you do not know who own Durden's Mine?" Jerry repeated, coldly.

"No, I dunno," he answered, slowly, then moved his chair outside, where no more such questions could reach him.

CHAPTER X.

"And also this
Fell into dust, and I was left alone."

Dan Burk would know.

This thought had come to Jerry in the night, and he determined to follow it up. As far back as he could remember, he had heard Joe speak of Dan Burk more than of anyone else save the doctor; and Jerry felt quite sure that Dan could tell him all he wanted to know, and more, for Dan was an older inhabitant than Joe, and would know more of the local history.

Another fact of which Jerry was now convinced was that Joe got his money from Durden's Mine, which made his lack of knowledge as to the ownership seem more strange. But Burk would know, and Jerry was determined to make Burk tell him all that was known of the mine. Durden's had been always a strange story to him; as long as he had believed what the doctor had told him, that the better find was at Eureka—and had remembered what Joe had told him in his childhood about Durden's as a fairy story—he could understand the desertion of Durden's; but if, as Joe had lately revealed, Durden's mine was full of gold, why had it been deserted—surely not for a ghost story! It was true that the people were not aggressively energetic; and as the Doctor and Lije Milton had invested in Eureka it was natural, perhaps, that the people should follow; but still, Joe's assertion of the richness of the mine made the facts hard to be understood. And now that he had committed himself so far

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that he could not go back, he must get at the truth of the story.

His scheme was far within the bounds of possibility; and success would bring him money, the one thing he needed to put him on a level with Paul, and to compel the doctor to respect his shrewdness, at least.

He would go to Dan Burk in the morning before school, and if he gained any information it would help him in his interview with Morris.

He left home as early as Joe that day, only waiting until he was out of sight. He thought he had never known Joe to take so long to go; he was excited and restless, and the waiting was trying.

The paper he had read the night before had put new thoughts into his mind; he was known out there in the East much more than where he lived, and was looked on as a crafty mob-leader—as a violent communist—as a dangerous demagogue; and men were coming out to cast in their fortunes with him—to follow him wherever he should lead.

This sudden thought had demoralized him for a little while, but now he had recovered himself, and was determined to be ready for all who should come. A new excitement was creeping into his veins: his army that was to do battle against influence and capital; that was to win for all who came after a foothold and a hope; that was to make him triumphant—this army was fast doubling itself. The "halt, and the maimed, and the blind" were coming, "with neither scrip nor purse"—coming to test a great question, and to prove once more, in the long, dark history of the world, the power of the people!

He walked more rapidly to keep pace with his thoughts. Of course Joe would not have worked in Durden's Mine all these years, his thoughts ran on, unless there was gold to be found there. It would hurt him to stop, but the avarice of one man could not stand against the gain of the many; Joe had had long years in which to lay up store, now he must stop; indeed, he was too old to do such hard work, and once well started, Jerry knew that he could support them both easily.

Early as it was, Dan Burk's door was open, and he and his shop were both dirty. There were no loungers about as yet, however, and Jerry felt he had done well to come at this hour; for besides the quiet, Dan had had nothing to drink.

"I wanted to see you, Mr. Burk," Jerry began, "and had no other time; can you spare me a half-hour?"

"I reckon," and Dan placed a chair for his visitor.

"Who owns Durden's Mine?" The question was so sudden that Dan started, with a betraying look of wonder in his eyes.

"Durden's Mine?" doubtfully.

"Yes," and Jerry did not move his eyes.

"What do you want to know for?" cautiously.

"Tell me; you will not lose anything by it," and the two men looked fully and searchingly into each other's eyes. The suspicious, treacherous eye of the shopkeeper — the tired, keen eyes of the clever school-master who had just now begun to measure his strength against the world.

"All right," and Dan laid his hand on Jerry's knee, "it's Mis. Milton's."

For a moment Jerry looked at him in silence; was he telling the truth? Could this be the truth and Joe not know it?"

"I'll go with you and ask her," the man went on, his face reddening angrily under his companion's eyes; "has Joe lied?"

"That will do!" and a look flashed on him that made the words die on his lips; he had heard of the difficulty with Morris.

"And she owns all the land near it?" rising.

"She does."

"Will she sell?"

"She will, an' be glad."

Then Jerry turned away, looking out the door and down the road to the doctor's house; he could see the chairs on the piazza, and someone tramping up and down; how strange it was that he could not go there now, and ask advice—when, and where, and how had the breach between them begun?

"You will not mention this," he said at last, turning his eyes again on Burk, "if you do——"

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"It's all right—all right, Mr. Wilkerson, all right," the man interrupted, eagerly, "it's for you to remember, please, that I aint said nuthin'."

"Very well," and Jerry walked away.

Joe *had* lied! and he drew a long breath. Joe, whom he had trusted more than he would have trusted himself; Joe, whom he had looked on as the one honest man he knew; Joe, whom in the last few weeks he had put far above the doctor for the exquisite quality of sincerity!

He walked rapidly, and his heels struck sharply on the hardened soil.

Who could be trusted?

Slowly the long story unwound itself, this one clew showed him all. 'Lije Milton had owned the mine; had been unable to put workmen into it because of the mysterious sights and sounds that haunted it; had gone in himself—

Jerry's thoughts stopped, and a cold sweat came out on him, and his mind went groping back to that day when he had gone to see 'Lije Milton buried; what where all the circumstances—what had Joe told him?

He could not remember, save that 'Lije had met with some injury in the mine from which he had never recovered.

He drew his hand across his brow, and sat down on a stone. If only he could recall and be able to put together all that had been told him. How long had old Durden been dead; how long had Joe been gathering gold on his own account; how long had 'Lije Milton owned the mine? He remembered that 'Lije had been the discoverer of the new mine in Eureka, and reaping gold from there, had been content, probably, to let his old property go.

Jerry rose slowly: he would not think these thoughts any longer; he dared not formulate any theory on the slight basis he had, and the suspicions that had come to him were too dreadful to be retained for a moment. Besides, if 'Lije had met with any tangible foul play while in the mine, he would certainly have had his revenge. He felt relieved when he reached this conclusion, and put all thoughts away from him save that Durden's Mine had a bad name, and so would be sold at a great discount. He must by some means get money to buy the property, so securing it to his scheme; and he must find some person who would be figure-head to hold this land and sell it out in lots to the people from Eureka.

The scheme grew as he walked, and took clearer and clearer shape in his mind.

Faster and faster he tramped; his eyes shining, and a slow color creeping up his dark face; and he saw himself a rich, successful man.

And Joe?

The memory came over him like a cold wave, and he tried to put it aside. Joe was a liar, but not a murderer of his friend; facts disproved that.

And most men seemed to be liars?

He took his hat off; his head was hot and throbbing, and he hated himself that he had found cause against this man who had clothed him and fed him. It was treacherous to judge him. Joe had gathered gold secretly, and had hoarded it all these years; why not, if he found pleasure in it? He had gathered it from another man's possessions!

The thought came unexpectedly, and put yet another face on the question: Joe had stolen his money. And yet, could it be called stealing if he had made a find in a place that others had deserted? had deserted from stupid superstition, while Joe had been brave enough to go in and work there? Could it be stealing?

Perhaps not; yet, who was it that he had heard talk of the horrors of the old mine; who had said it was death to go there; who had been so mortally terrified at the nervous vision of his childhood?

Had it been a nervous vision?

Even after all these years he did not like the memory of it.

He put on his hat; it was ridiculous to deal in such fancies, and be swayed by them. If Joe had stolen the chance and the gold, it was not his care—he was not the keeper of Joe's conscience.

He walked steadily on, and into the town. He would have to turn Morris away again to-day; he had not learned enough to answer him yet. He would have made overtures to Burk that morning, but what the man had told him

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

had shocked him from his purpose; he would go again to-morrow and make his inquiries the more sure from having had time to think them over.

The day seemed endless; the children stumbled and struggled with their lessons in a way that was exasperating; they seemed bent on making mistakes, on disobeying orders, on being kept in and whipped. The atmosphere was heavy and clinging; the smell of onions and dirt was intensified, and Jerry's nerves seemed to strain, and tingle, and long for freedom. He must have something better than this.

The day waned, and the tasks and punishments were settled; the future statesmen, and presidents, and "reigning belles" had gone home to their hovels; and Jerry, locking up his desk, heard the horn ring out so fine and clear. He listened; when he became rich and could claim success, he would have a band of instruments such as he had read of, and would ask the doctor to come and hear them play. He would have this horn multiplied a hundredfold, and every note his own, and calling to him.

Always he had read of music with a longing: it would mean something to him; once in the night a traveller had passed down the trail thrumming a guitar, and Jerry had heard the sound; heard it coming like the throbbing of a heart—coming with a cry so vague, so unfinished—only a cry with so much left unsaid. Coming nearer and nearer, until it seemed to throb all about him as he sat up in the darkness listening. Beating, crying, pleading with him to fill out the unworded measure.

Fading down the black gorge, the sobbing, broken cry passed away.

Would music be like all the other things he had found in life—a fragment? Would he be striving always after some unfinished measure?

Again the sound of the horn swept by him, and he listened with an impatience that was unbearable. Why had he been for all these years an idle dreamer, wasting so much time preparing himself for the cramped, chance life of a writer: feeding himself ill on dreams and vagaries that seemed now to possess him and to weaken him?

He closed and locked the door with an angry vehemence that had no foundation save dissatisfaction with himself. He had been *such* a fool! Would he be able now to gather himself together, and to stand entirely alone; could he put aside all associations, all qualms of conscience, all feeling, and conquer success? And he wondered vaguely if many of those whom the world called successful had consciences.

CHAPTER XI.

"Then every evil word I had spoken once,
And every evil thought I had thought of old,
And every evil deed I ever did,
Awoke and cried."

It was very dark, and the entrance was dwindling to a point of light. Still Joe seemed to know the way with wonderful accuracy, and walked the rough path with the stealth and swiftness of a cat.

A little further and he paused, felt along the wall, fitted his hands slowly and carefully into a crevice, then swung himself over some danger so well known to him, that dropping safely on his feet, he drew a short, sharp breath. He stopped a moment just where he had dropped, until he lighted a small lantern which he took from a ledge in the rock, then moved on. Carefully and slowly he went now, crawling like a great spider, scraping himself against the wall. Only a little space was lighted by the lantern, but the ledge of rocks on which he walked stopped far within that radius. Steadily on, looking neither to the right nor to the left, but only on the next step he must take; carefully, cautiously, slowly, with his eyes shining and his breath coming heavily. One misstep and he would never be heard of again: one man had made this misstep; he was sure of it, although no one else was; he knew because he had heard the legend of this narrow way from Dan Burk, who had been the near friend of old Durden.

And beyond this narrow way he had found the cave the story had told about; and where, unknown to Burk even, the old man had hoarded great treasure.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There was something strange about this mine; some devil of greed and deception seemed to inhabit it.

He was safe over the narrow way now, and putting his lantern down, he began to change his clothes with rapid, stealthy movements. The whole man seemed transformed and alive; seemed to have shaken off the stolid heaviness he wore in the outside world, and instead moved about with nervous quickness. Having arrayed himself in a rough, worn suit of clothes, he put his usual apparel in a corner, then paused and made a little wailing cry—a peculiar sound that in an instant seemed to be repeated by a hundred voices; taken up again and again; coming back sometimes loud, sometimes low; seeming to die away, then waking suddenly to one more repetition; weird, startling, awful!

He listened, and seemed to know when it was finished, then made the little sound again—this time not waiting, but going deeper into the gloom, leaving the little cries to wander up and down the hopeless darkness until they died—up and down until the merciful silence hushed them.

Joe lighted two more lanterns standing in niches in the wall, then looked anxiously around the low arched recess that almost was a room.

The walls looked dull and dead, and here and there were worked into deep holes; especially on the side overhanging a stream which ran the entire length of the room—a stream that appeared without visible reason in one corner of the room, foaming white and strong against the fretting barriers, and disappeared suddenly through a low arch in the corner furthest from Joe's place of entrance. Across its place of exit was stretched a net of finest wire; and deeper in the narrow crack, a web of cloth.

Low Joe stooped and peered with his glittering eyes, that seemed to enlarge and gleam as he caught sight of the shining particles washed by the water against his catches.

"A good haul," he muttered, "a rale good haul;" then he rose, and took down from the jagged ribs of the cave fresh nets of wire and cloth. Carefully he fixed them in place before he removed the standing catches, waiting patiently for a few moments that the disturbed water might resume its usual flow—no smallest grain must be lost. Carefully he removed the nets that held the gold, emptying their hoard into a flat pan of water; dipping them again and again; examining them with 'bated breath.

"Orl fur Jerry," he whispered, stirring the glittering particles with his hungry-looking hands, "an' a good lot; an' he dunno, damn it!" tying a fine cloth tightly over the whole pan, "dunno nothin' jest ceppen hisn's books; talkin' so fine 'bout t'other folks, an' what he 'llows they orter hev; he aint got good sense 'bout thet, God bless 'im! an sich shinin' eyes."

Carefully the string was untied when the last drop of water had been drained from the pan, and the cloth, with the valuable sediment inside, was gathered together and tied like a bag, then hung near a small iron stove filled with charcoal.

Slowly the fire lighted and grew red and glowing—glancing through the one opening in the cylinder like a great red eye, dull, burning, watchful of the poor warped soul that only lived while in this den! who seemed endued with new life; who vibrated and glowed as he watched the steam that floated about the wet bag. It would not take very long to get dry, then he would get all the particles out, even to the least dust; shake it clear and clean into the little leather bag that soon would be full enough to take to Eureka.

If only Jerry would have a little sense; just a little, he thought, as he squatted before the charcoal stove, looking steadily into the red eye.

If only Jerry knew anything besides books; he had learned too much; he had learned more than Paul — his thoughts ran on—for Paul only knew how to get and spend money; he did not know that a man ought to think about other men having money; Jerry had learned too much.

He rubbed his hand back on his stubbly gray hair; if Jerry only knew gold; if Jerry could only see what gold could get—could only spend gold; Jerry would be like Paul, he would take all he could get and never ask where it came from.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Maybe if Jerry could be sent to where Paul came from, he would learn to be like Paul.

The idea crept into the anxious mind, and the deep-set eyes seemed to catch fire from the red eye of the stove, and to light up as the new possibility loomed before them.

Jerry must go East.

At last the problem was solved: Jerry must learn to spend money; he must learn to love it; then Joe would be left in peaceful possession of his den.

The red eye of the stove seemed to flash—the stream seemed to lift up its voice almost into a laugh; and from the black abyss the cries seemed to wake and come back to the lonely worker. He listened.

"I hears it sometimes," he whispered, "when I aint never made no soun'!" and he looked over his shoulder as if he expected to see a vision. "It'd orl a-been for youuns, Nan, if youuns hed a-lived; I swar afore God!" putting his hands over his face—"I swar!"

The stream laughed on and on, washing high up against the nets; the eye of the stove glared at the dull wall; the lanterns flickered and flared as mysterious draughts of wind reached up and touched them with invisible, ghostly fingers; and the cries—were they echoing still through the blackness of that awful passage? Were the souls wrecked by this fatal den waking and sobbing in the distance?

"I swar, Nan!" and the lean, work-hardened body swayed back and forth where it crouched—"I swar!"

Surely the dead came back—surely!

The man rose to his feet hurriedly; he must make some movement. Close over the stream was his work, and standing in the cold water he swung his pick with even, regular strokes; breaking the rocks into very small pieces that dropped into the stream. The water and his hammer would do the rest of the work for him.

On and on he worked, his strokes falling fast and hard—his breath coming sharp and thick. On and on, only stopping now and then to step from the cold water, that he might warm his feet near the stove. It would be his death some day, this standing in the water; he had seen many a miner ruined in this way; either drawn up with rheumatism and left a helpless cripple, or dying suddenly from some congestion caused by cold. He knew that in this place and in this work he would meet his death; he knew that sooner or later the end would meet him here. Maybe, walking that narrow ledge, he would slip over with a last long cry that would live to haunt some future worker.

Steadily the strokes fell; it was all for Jerry. And he must persuade Jerry to go East; to see the things that made money valuable. There was nothing out here in the wilderness to make men love money. But he had seen such things long ago when, in the East, he and Nancy were nearly starved; it was then that a man had persuaded them and a lot of other people to move West, where a friend of his, Mr. Durden, had found a mine. They had had hard times that made him long for money, and made him come to this wild country. But when they reached the place they found that old Durden had disappeared in the mine some time before, and the place was closed because the people were afraid. They were simple, superstitious country people — content if they had room to plant a little patch, and live from hand to mouth. There had been no regular miners nor adventurers among them.

His Nan would have been content with a little patch; but Joe had dreamed golden dreams; and besides it was too late that year to plant a garden. Then it was that in despair he had explored the mine, had found the black hole, and on its brink a little nugget that some creature must have dropped there.

He remembered now the intense, wondering joy of that find; and how he had taken it to Dan Burk, the one shopkeeper of the whole region, who was at that time reduced to as great straits almost as Joe. It was then that, with much cautious questioning, they measured each other, and determined to trust each other. Joe was not so much afraid of the mine as he was of hunger and death for himself and his Nancy; and Burk, who was afraid of the mine, knew all its secrets or thought that he did.

He knew that the shaft beginning in

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a cave opening into which the stream, turned out of its course by Durden, had once flowed—that this shaft had run into an awful abyss which the people said had no bottom, and into which the stream must have fallen originally ; that on the other side of this abyss there was a large cave about which the Indians had left a story.

When by accident the workmen had broken into this hole, the last Indian left in the settlement came to see it and told his story. He said that on the other side of this hole there was a cave in which there was a stream that washed out quantities of gold ; that his tribe, hearing of this treasure-house, had conquered the tribe owning it. The battle had been fought out on the plain, and the conquered tribe, when desperately pushed by their enemies, had driven their wives and children through the cave and into this hole, themselves jumping in after, doing this rather than become prisoners, and lose their places as braves. He went on to say that, after this, no good luck had come to his tribe anymore, that the Great Spirit fought against them in every battle, until in the days of his father they had closed and concealed the entrance to the cave. That he had never known where it was.

Long consultations had been held between old Durden and his few helpers ; but the men refused to brave the dangers of such a crossing for any amount of money. The huge bonfire built on the edge of the hole showed a narrow tunnel that seemed to have neither bottom, nor top, nor end ; the only vestige of any foothold being a narrow ledge of rock that could be reached only by swinging across a section of the hole. There was talk of a bridge, but there was no skill there to throw one across the hole—and even while they talked, strange sounds had come from the hole ; they were made to listen by the Indian ; it was the crying, he said, of the murdered women and children.

So the last man of the victorious tribe had spoken ; with his hand resting on the shoulder of old Durden, and something shining in his eyes that made old Durden advise against the bridge.

Later, old Durden had heard further from the Indian : a whispered story of hidden treasure, that made him risk the dreadful passage ; and Dan Burk said he had found much.

The shaft that in the first instance had diverged from the bed of the stream, but that in breaking into the abyss had come into it again, was once more turned aside ; and the men, who would not attempt to cross the hole, agreed willingly to work there.

So all day long the men worked busily, and in the night the old man went and came on his dangerous journeys ; for day and night were the same in that black place. For fear of having to share his gains, Durden revealed his find to one man only, and to him only because he needed a place of exchange for his nuggets and dust.

Dan Burk had agreed to keep his secret for a certain share of the spoil, and had made money on the bargain, until once the old man went, but came no more.

Search was made until they came to the hole that so held all in awe, and no man would go further. They heard dreadful sounds and cries, they said, and saw strange shadows looming up in the darkness, so that they turned back in terror, and the mine was deserted.

The people had hard times then until the doctor came and took command, and 'Lije Milton, who had bought Durden's on a speculation, found the new mine at Eureka; then peace came again, and old Durden was forgotten save as a ghost.

But during those dark days one man dared all, and crossing the dreadful abyss, crept along the narrow ledge. He found the hidden treasure, and found also that his predecessor had not shared fairly ; but carefully, in strong boxes, were little bags, clumsily but safely made, and full of dust ; and in another box a shining pile of golden coin.

The old man had not carried out for exchange all that he found hidden, but he had brought back and stored afresh all the money he had gained. And all his tools were there, and the charcoal stove, but no other sign of him ; and Dan Burk's theory was that he had lost himself in trying to find the old entrance to the cave. Joe, who knew so

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

well the perils of the passage, said he had fallen into the hole.

And Joe, was he to reveal all that he had found? It was surely his, he had risked an awful death to win it; a death Dan Burk would never have risked. No, it was not stealing; and when his friend 'Lije Milton wondered about the old story, he did not tell his secret: 'Lije had plenty, and where he worked was not 'Lije's mine, but an old Indian cave that belonged to no one.

Of course it was not stealing; and if Jerry would only let him be—or if he could only find the old entrance to the cave!

He stopped in his work and laid his pick down; there was one place he suspected as the end of the old entrance passage, and once he had explored it for a little distance; not very far, but far enough to realize that the dangers of it were too manifold for him to dare a hurried investigation; and he could not be absent for any length of time without an explanation.

He took up a great stone pestle to crush the pieces of rock that had fallen into the water.

Jerry must go East to learn to love money, then Joe could have his days free from observation.

Surely Jerry *must* go East: the thought took stronger and stronger hold on him; Jerry must learn the worth of this money he had won from the hands of Death.

He had worked hard to get it; had spent sparingly to hide it, for he had learned to love the shining stuff for itself. It seemed to get into his eyes, as his Nancy had said, and to shine and shine until he could see nothing else. How heavily freighted he had been sometimes, when crossing that narrow ledge; how carefully, while Nancy slept, had he dug a hole in the corner of the house; how secretly night after night had he put away his treasure. And was it all to be cast to the crowd to be scrambled for when Jerry came into possession?

He had not divided the found gold-dust with Dan Burk, nor the box of money; but only divided a part of what he got each day. He had found in the engineer of the Eureka Mine a man who paid more fairly for the gold, and who asked no questions, as he was in constant receipt of private stores of this sort. Every man who had a little "find" of his own tried to hide it from his fellow-man; and all these little hoards went to enhance the value of the Eureka Mine. Of course it all came from this mine; and the shares ran up; and the engineer's salary was increased; and his speculations grew; and Joe's secret was safe. As to Dan Burk, his share diminished steadily, and Joe grew more importunate in his demands; for he could get a better price, he said.

Of what use was it that Dan threatened to tell of the cave; Joe's retort came readily—"Tell 'em, an' show 'em the way."

It was hopeless; no one would attempt that passage when gold was so easily found elsewhere, and Dan was quite sure that even Joe would not attempt it for the small amount brought to him as his share. He knew quite well that Joe was cheating him, but what redress was there? So Dan determined to make what he could by holding the secret; but was very willing to sell any information to Jerry when he came to him with his eyes gleaming so dangerously, and his words coming so sharp and quick. He had not thought it safe to thwart Jerry; and by helping him he might gain something.

Poor Joe!

Long ago he had removed all the treasure from the cave and stored it where a written paper would reveal it. And the paper was sealed and in the doctor's keeping; he knew the doctor would see his wishes strictly carried out if he did not know where the money came from; but once acknowledge the source of his gains, and he knew that strict justice would be done: justice such as Jerry believed in; and the money would be divided out to every soul who had the remotest claim on the mine. So the paper revealed nothing save where the money was, how hidden, and declaring it all to be for Jerry. Nor was the doctor to read this paper unless Jerry willed it so; and since the recent misunderstanding Joe felt an extra degree of security in the thought that Jerry would not show the paper to the doctor.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It was all well stored now, and if any misstep left Joe's place vacant, the money he loved so well, and the young fellow his love bade fair to ruin, would both be safe.

But the old lost entrance: if only he could find that, no law nor justice could disturb him, for none could prove that he was working in Durden's Mine.

The cave was his own find; Dan Burk had heard of it only as a tradition, a wild story that meant little; Joe, however, had worked his way to it, and surely had a right to what he found there.

Only he must find that old entrance.

CHAPTER XII.

"Hadst thou understood
The things belonging to thy peace and ours!
Is there no prophet but the voice that calls
Doom upon Kings, or in the waste, 'Repent?'

O rather pray for those and pity them,
Who through their own desire accomplished bring
Their own gray hairs with sorrow to the grave—"

The papers came daily now; filled with warnings, and vituperations, and news of the horde that was preparing to come to Durden's.

Only too swiftly were the shortening days flying by; and the railway seemed to loom terribly near to Jerry, while day by day his fame grew until he found himself a hero.

Dave Morris and Dan Burk had voluntarily come into his plans, and had agreed to advance money for the scheme on any terms he chose to name.

Burk accepted the position as "Land Agent," and bought all the land about Durden's Mine. Dave Morris put so high a price on his whiskey that none but the best-paid miners, and the new civil engineers belonging to the despised "doctor," could avail themselves of the luxury. And of the first new people who came, Morris made good use: he persuaded them to give great prices for the land about Eureka, so relieving the Eureka people of their properties, and allowing them to move to Durden's with money to invest.

Jerry watched with intense interest the extraordinary sales that Morris made for his Eureka friends; listened as the strangers were made to read the pamphlet put out by the engineer of the Eureka Mine, in which all the lands in and about Eureka were represented as gold lands; listened afterward as the Eureka people were persuaded to buy lands in the Durden's settlement; and listening, wondered that Morris did not stand higher in the world.

Morris's own Eureka lot went for the highest possible price, part of which was invested in Durden's land, the rest being generously lent to forward the new scheme.

Eureka was in a state of the wildest excitement: land changed hands from hour to hour; was sold by telegraph even, the operator making a small percentage in the general upheaval; and all the money, following Dave Morris's, fell into the hands of the new land agents, Daniel Burk & Co.

Even to Jerry, who stood behind the scenes—who pulled the wires—even to him it seemed like magic. And when with Dan Burk he went to see Mrs. Milton about buying the mine, he felt as if some strange power, other than he knew, was working for him.

Instantly she acceded to their request.

"Durden's hes allers been onlucky," she said, and willingly gave up the mine and all the adjacent lands for relatively a small amount.

And Joe, left outside of all plans and arrangements, watched, and listened, and wondered in his own anxious mind how Jerry had accomplished it. Things were taking such a strangely sudden turn that he could not satisfy himself with any solution save that Jerry, and not Dan Burk, was the moving power; even though Jerry kept himself well in the background. No one but Jerry would have had the sense to direct such a move as this, and carry it out so successfully.

Land in Durden's could have demanded almost any price; yet, stranger than anything that had ever happened in his experience, Joe saw that the price was never increased; and this convinced him that Jerry was manager.

Rapidly the people from Eureka be-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

gan to erect their small houses in all directions: their small houses that they were allowed to move from Eureka to Durden's. The lots were not laid out with the beautiful regularity of the great tract of land about Eureka, but they were sold or rented much more rapidly. Durden's was surely favored in its situation; high up from the plain, and with plenty of water, it was cooler and more healthy than Eureka; and Jerry wondered that the doctor had not chosen it instead of Eureka as his centre of operations. And every day, as Jerry went to his school, he was stopped and consulted as to the future of Durden's, and the advisability of buying land there. Was gold to be found there—was there money to be made by holding the land—was it better and safer than holding land in Eureka?

And to all these questions he answered yes; and revealed his position further by saying that this was the chance he had promised to find and secure for the people; and he wanted them to understand that it had his fullest sanction. To prove this, they could see that, no matter what the demand for land might be, the price of the land was never raised. He came forward now, when this last fact had been sufficiently observed and proved, so that he could act without being suspected as a speculator, and took hold of the scheme with a strong guiding hand; and the people flocked to him.

Three new "finds" had been made in Durden's gorge, and the regular miners, thrown out of work in Eureka, were leading the way in opening them up most successfully.

Jerry's heart burned within him; money and people came in rapidly; Burk and Morris carried out his every wish, and rendered a strict account of every transaction. A committee had been appointed and called the "Town Committee," and of this Jerry had been elected chairman. The first resolution passed was one prohibiting the sale of liquor in the settlement: a strange law, the old inhabitants thought; and looked on Jerry as a sort of supernatural creature. After this a corps of workmen had been detailed to cut wood for the Community, and to bring it down from the mountain-side; this the "Town Committee" shared out according to the number in each family. The "Town Committee" had in their hands also the opening of the mine, in which every Commune man was to buy shares, and be paid regular dividends as soon as they could be declared. Any gold found on private lands was the property of the land-holder; every man who held shares in the public mine had to do a certain amount of work there, or put a man in his place; for private finds must not be worked to the detriment of the public good.

Eureka stood still and breathless: would this marvellous enterprise prove entirely disastrous to them? It was a question that grew more grave as day by day there were fresh defections from the Eureka colony; day after day men came and cast in their lots with the Durden's Commune; for so Jerry had named it; and the Eastern papers, taking it up, rang with it, and Jerry became more and more notorious.

But, amid all the toil and tumult, one came and went silent and unnoticed. Going out from his house before day, before the brisk new town that fast was climbing up to the mine's mouth was astir; and coming down in the darkness when all were at their evening meal.

Like a bent shadow he came and went; every day stooping a little more; every day the frost gathering a little more thickly on his stiff hair. He was unheeded in the general rush; left outside of all plans; left outside of all that filled Jerry's life. He knew that Jerry was the leader; he knew that Jerry had stopped teaching the school, that now had been moved from Eureka to Durden's; he knew that Durden's Mine had changed hands; he knew that Jerry had lost all confidence in him; he knew that the man, Dan Burk, whom he had saved from starvation, he knew he had betrayed him: and deeper down in his old heart he knew that not for much longer could he walk in his old paths, and reap his golden harvest.

The old mine was like a home to him—like mother—wife—children; all the ties of life were for him concentrated in that black hole, and in the glittering

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

particles he found there. How could he live his life day after day, and all the object gone out of it; hour after hour sit and smoke idly by the fire; hearing in imagination only the laugh of the stream, that in these years had come to seem the voice of a friend; and seeing in memory only the great red eye of the stove?

For many years he had lived there, working alone in the darkness; with at first the need of the money for spur—afterward for love of the money;—later, for the love of the wistful eyes of the boy who looked to him for everything.

The little, thin voice, and patient, humble face, so sorrowful, so lonely.

Somehow the boy had taken a deep hold on him, and all the gold he gathered was to provide for this little creature. It had made him work all the harder: he had been happy in paying for his education and clothes; in each winter providing for all his wants; in making the house and the living gradually better for him, and in each day adding to the store of gold. He had been proud of Jerry's absorption in books and dreams; proud of the gradual change that left such a distance between him and Jerry, and lifted the boy to the level of Paul and the doctor. It had never occurred to him but that Jerry loved him, although toward the last Jerry's devotion to the doctor had hurt him a little. But now?

Now his boy had turned from him entirely—had joined with a stranger in betraying him—was living his life apart, without any reference to him.

It had been for Jerry's good that he had deceived him about the mine; yet from that night Jerry had never uttered one word in his hearing of the hopes and wishes he entertained for his scheme.

The more Joe thought and suffered, the more surely he came to one conclusion. Only one thing was left to be done; only one plan that could save him and teach Jerry wisdom: it was to send Jerry East that he might learn to love money, and while he was absent, find the old entrance to the cave. This done, he would be safe in his possession—safe to gather and hoard the gold that Jerry would one day appreciate, and appreciating would come back to his old relations with his truest friend.

But how could he accomplish this end? He had not been near Dan Burk, for a moment's speech even, since the mine changed hands; a tacit understanding made them avoid each other; and now all Joe's gold dust went to Engineer Mills, of the Eureka Mine.

He must approach Burk once more, however, to get his assistance in sending Jerry away; and he felt quite sure he could find means to make Burk persuade Jerry to go.

He had stopped work while he brought to a conclusion these thoughts of many weeks; and now storing in his pocket the last little bag of gold that he had gathered, he set his nets to last for two days, for to-morrow he must go into Eureka to sell the dust. He did not know what might happen any day, so he busied himself making all safe behind him; there was nothing there to tell any tales except the nets and the little black stove, things of little value; friends who could not betray him.

It was late now, very late; Jerry would be at home by this, and the supper ready, but for all that he must see Dan Burk.

Carefully he chose his way through the new settlement that had climbed the mountain-side, down into the old village which was nearer the level of the plain; carefully, for people might ask questions if they saw him in the town at night.

Dan Burk was at home, sitting in his shop, that looked much improved; it was clean, and without the smell of bacon and whiskey that had never been absent before. The Community had provision depots now, and Dan's place served only as a shop for clothes and tools. Besides, his business as land agent kept him busy, and in the future would pay him better than selling whiskey.

More than this, Dan's shirt was clean, and his black hair brushed to a painful state of sleekness. He turned when the door opened, and recognizing his visitor, he rose.

For a moment he paused, then pushed his chair back and came forward with a suspicious profusion of welcome.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"H' are you, ole pard, h' are you?" he said, "durned if I aint real glad to see you," holding out his hand.

"I'm well as common," Joe answered, and stood still with his hands in his pockets.

There was a pause while Dan rubbed his overlooked hand down his sleek hair, with a doubtful look creeping into his light eyes.

"Take a cheer," he said at last.

"No, I'm 'bleeged," and Joe took one hand from his pockets to push his hat back, "I aint got much to blate 'bout."

"All right," and Dan cleared his throat that had become strangely dry.

"Youuns knows orl of Jerry's doin's," Joe began, with both hands again in his pockets, and his keen, deep-set eyes fixed steadily on Dan's half-averted face, "an' I don't; an' youuns knows somer my doin's, an' agin youuns don't," pausing solemnly, after this last thrust that made Dan look round; "no," more slowly, "youuns dunno orl, damned if yer do!" with an angry light gleaming in his eyes that made Dan wince a little.

"But I aint come jest to jaw, ner to tell youuns nothin' 'bout me," more mildly, "but sumpen 'bout Jerry."

"About Mr. Wilkerson?" and Dan was all attention.

"Thet's what I said," Joe answered, "'bout youuns' Mr. Wilkerson an' 'bout my Jerry; an' it's jest thet he aint got no sense ceppen 'bout books. Great-day-in-the-mornin'! why, man, Jerry dunno nothin' mo' 'bout money an' a baby, he don't," and Joe shook his head solemnly.

"He knows how to git it, all the same," and Dan laughed in a relieved way.

"Orl the same he aint a-goin' to keep it," Joe said, "ner he aint a-goin' to let youuns keep it, an' don't yer furgit it! An' he's jest a-goin' to shar an' shar alike orl roun' this town; jest youuns watch," waxing more earnest; "I knows thar aint nobody agoin' to make no forchins 'roun' this town tell Jerry larns to love money: durned if they will!"

"Learns to love money?" Dan repeated, slowly; "Lor, Joe, you're plum crazy!"

"Orl right," and Joe shook his head slowly, "orl right, an' when youuns keeps on a-seein' Jerry jest a-spreadin' orl the money roun' even; an' keeps on axin youuns fur 'counts; an' a-buildin' a meetin'-house, an' a school-house, and a-stoppin' folks from cussin' an' whiskey, youuns'll 'member me, an' mebbe youuns'll say, 'Ole Joe warnt crazy nuther.' Mebbe youuns'll 'member, 'an mebbe youuns'll cuss 'cause youuns 'members."

"'Members what, Joe Gilliam?" and Burk uttered some oaths even now, before the prophesied time.

"'Members as Joe Gilliam said to sen' Jerry to the East, whar he'd larn to love money; 'cause when a man don't love money hissef, he's jest sartain to 'spise them as do," pausing as if to give his words more weight, "an' thet's the reasin as Jerry 'spises the doctor 'cause he spekylates in lan' to make money; an' thet's the reasin as Jerry 'spises me, 'cause I tole him I bet on money, I did. An' if a man 'spises money he aint a-goin' to save none, ner to let nobody save none; an' don't youuns furgit it."

Burk stood without motion, and looked at his companion, while a great wonder grew slowly in his eyes: was the old man losing his mind?

Joe went on slowly.

"Jerry aint never seen nothin' as money kin buy," he said, "an' he don't keer nothin 'bout it; he kin git vittles, an' cloze, an' books, an' thet's orl he wants, an' he dunno nothin' mo'."

"Darnation!" and a new light seemed to be coming to Dan.

"I knows it's true," Joe went on, "an' Jerry aint a-goin' to let nobody hev no moren thet, he aint; an' he's a-goin' to make orl go to school, an' go to meetin', 'cause Jerry don't know nothin' ceppen books."

Burk stood silent: this model community, with no possibility of private gains, was not his ideal town; so far he had rendered a strict account of all money in his hands; but he had not made his calculations on this senseless honesty lasting forever, but only until the enterprise was fairly started. He had voted for school-house and church, thinking they would look well in the circular which the Town Committee had put out, and would make the place more attractive to outsiders.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"An' he'll tuck in orl the trash as'll come alonger the railroad," Joe went on, "'cause when orl the lan' round Eureky were sold, Jerry were jest a-rippin' 'bout folks not a-gittin' a shar' of lan.' Youuns hearn him a-talkin' 'bout God a-makin' the lan' for orl, jest like the sun and wind wuz;" then reflectively, "Mebbe it's so, then agin' mebbe it aint, 'cause if God 'llowed fur orl to hev the lan' I reckon it 'ud a-been fixed up thet away like the sun an' the wind wuz; thet's what I 'llows."

"An' it's true as mornin'," Dan granted.

"An' I dunno as orl God made were made fur ever' pusson," Joe went on, instructively, "'cause I knows as God made me, an' I'm durned if I'm fur ever' pusson; durned if I are!"

"That's so," and Dan looked still more grave.

This "all things in common" arrangement was a mystery to him; his ideas of justice and equality were circumscribed; it was not just that anyone should have more of this world's goods than Dan Burk, he thought, but if Dan Burk gained more than his brethren, it was because Dan Burk was a sharp fellow. As he had realized Jerry's enterprise, it looked like a fair opening for a few to make fortunes; but now Joe had put a new face on it, and Dan paused and thought very deeply. He realized the truth of all that the old man had said; and looking back, he could see plainly very convincing proofs that Joe's warning would benefit all who heeded it.

For how could they know of the wild desire for wealth and success that now possessed Jerry; how could they know of the deep plans he was laying for the future—thinking night and day of ways and means to persuade some capitalist to interest himself in the mine—growing thin and careworn with the strain and longing that was on him. How could they know of the consuming bitterness that held him—that almost would have caused him to sell himself if that would secure the success of his plans.

To Dan Burk, he was the cool, calm, far-seeing man, directing with consummate skill the workings of the little community; a controlled, fearless man who commanded the confidence of the people.

To Joe, he was still the wild dreamer who could realize nothing but the injustice of existing laws, and the needs of his fellows; who had no want nor care for money; who despised all practical things.

"I'll gie him the money to go, an' to spen'," Joe went on, breaking the silence that had fallen; "youuns'll wanter feller what onderstan's; a rale engynar to open Durden's agin," slowly.

"That's so," and Dan looked interested.

"Sen' Jerry to git him," Joe pursued, "jest youuns come to my house to-morrer night, an' tell Jerry 'bout goin', an' I'll fix the ress; jest youuns come;" then Joe turned away, but paused as he turned: "an' if youuns tells Jerry thet I've a-been har," he said slowly over his shoulder, "youuns'll never git in Durden's Mine, 'cause I knows the way of keepin' folks out," mysteriously; "but if youuns'll do my say, I'll pint the way myseff; farwell," and he walked slowly out, shutting the door after him, and leaving Dan Burk pondering deeply.

This was the best opportunity in the world; and the pay Joe required for leading the way into this mysterious mine was that Jerry should be persuaded to go at his expense to get an engineer—the engineer who was now the greatest need of the community.

It was strange pay, that this young man must be made to love money. What motive lay hidden under all this? In Burk's estimation old Joe did not have much sense; and think as he would, Dan could not solve the problem.

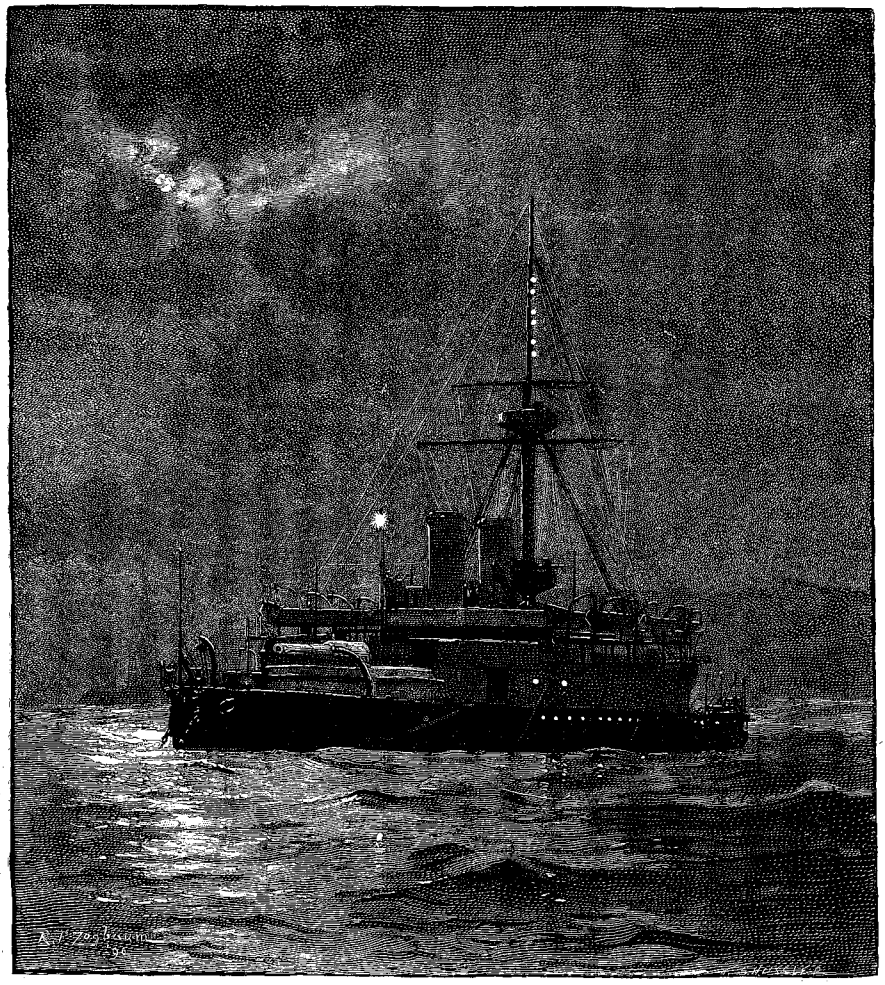
But of course he would accept the offer; that part was plain enough. He would go the following night to Joe's, and make the proposition; then Joe must manage the rest.

And old Joe, toiling up the steep path, felt his point was gained; rejoiced that he had been able to spread the toils for the feet of him he loved the best; had been able to set forth the temptation so that the young heart might most surely be led astray and be absorbed by the meanest of passions!

Poor old man; doing in his loving ignorance the greatest ill to the one creature he loved—the creature for whom he would have given his life!

(To be continued.)

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



"On the Benbow signal lights are flashing."

FROM PORT TO PORT WITH THE WHITE SQUADRON.

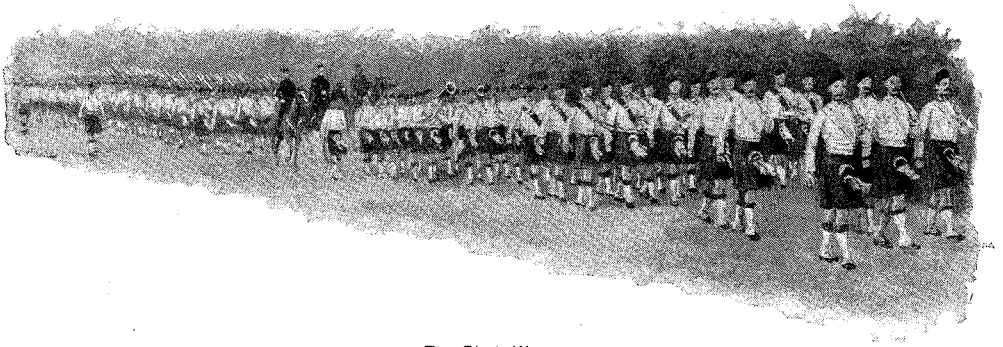
By Rufus Fairchild Zogbaum.

QUIETLY at anchor, the White Squadron lies in the harbor of Lisbon; the square blue jacks, dotted with stars, fly on the staffs at the bows of the cruisers, the admiral's ensign flutters on the mizzen of the flag-ship, the long pennants of the commanding officers of the other vessels wave from the main trucks, while at the sterns of all our men-of-war, opening out in graceful folds of blue and white and scarlet, the stars and stripes float proudly on the breeze. On every side of us ships are anchored or moored to great red buoys; steamboats fly swiftly past with beat of bright-hued paddle-wheels and warning shriek of whistle; far and near lumbering lighters move from shore to shore with great sails spread, or gather about the iron merchant steamers, dis-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

charging or loading their cargoes. The shore — where Lisbon rises, street on street—of gray-walled, red-roofed houses, tower of church and palace, green trees, and here and there a palm showing

On the spar-deck of the flag-ship everything is shipshape and in apple-pie order. The planking is as smooth and clean as holystone and sand, squilgee and brush can make it; the paint



The Black Watch.

above stone garden walls—runs like a levee in an American river town up to the buildings, forming a street on the harbor front, and is swarming with life, and lined with lighters, from which gangs of men are unloading the freight brought from the ships in the stream. There, where the fishing-boats gather—their nets, hanging on the masts to dry, forming a thick maze of mesh and cordage — the cries of the workmen, the jangling of street bells, the blowing off of the steam from the Trafaria ferry-boat by the wooden pier near the fish-market, the martial notes of the bugles sounding a call in the square, many-windowed barracks beyond, mingle in one confused, continuous roar. Almost straight to the eastward the harbor-mouth opens out to the sea, looking like a vast sheet of silvery blue, vying with the sky in brightness and dotted with incoming and departing craft of every kind. Away off, the heights of Cintra form a distant background to Belem-town, the houses of which mingle with those of Lisbon, and its old tower on the river's brink seems floating on the flood, while on the high hill back from the shore, the huge pile of the royal palace stands out against the sky. To the west the Tagus widens, forming a broad lake-like body of water, and the shore directly opposite the city, where Trafaria's houses lie in a deep ravine, towers up in a long line of dark bluffs.

on the bulwarks and rail, on boat-davits and squids, the ventilating shafts and masts is spotless, and the brightwork everywhere throws back sparkling glints to the sun's rays. The guns, great and small, their water-proof covers removed and placed out of sight somewhere, shine in all the glory of martial bronze, brass mountings, and polished blue steel; the yards on the tapering masts are squared with mathematical accuracy; every halliard, stay, and block, each coil of rope is in place, and fore and aft absolute order prevails. On the starboard side of the quarter-deck the space is clear from forward of the gangway to the stern; on the port side — arms piled in a perfectly aligned row of stacks near the 8-inch rifle—the marine guard is stationed; while forward, the crew—dressed in immaculate blue, flat-topped caps, white knife-lanyards hanging from under their wide collars where the glossy black-silk neckerchief is loosely knotted—is occupied in various ways. On the bridge a vigilant quarter-master moves about, glass under arm, reporting every movement about the harbor to the officer of the deck, who, white-gloved and trim in his neat service dress, and closely followed by the young apprentice, serving as his messenger, moves about from place to place, wherever his presence may be required. And a busy time he is having of it; during his four successive hours' tour

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of duty not a moment of quiet is his, and he is constantly on the alert, and constantly occupied, and is responsible, during his watch, for the proper execution of every order, every detail of the government of the ship and its crew.

"Shore-boat coming alongside port gangway, sir!"

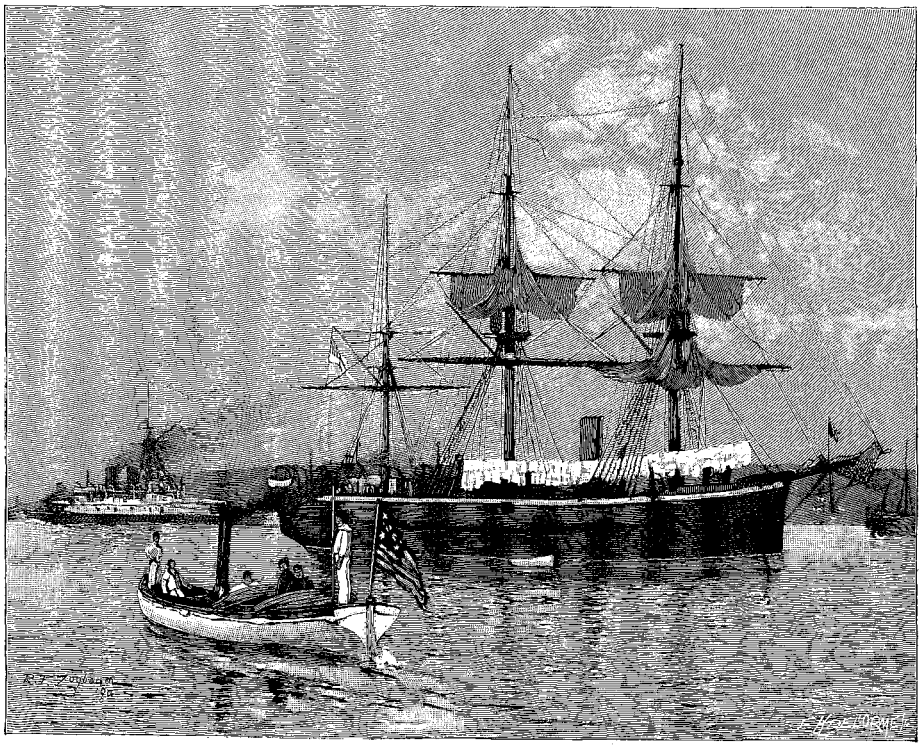
"All right!" and permission to board the ship, or to lie alongside for one purpose or another, is granted or refused.

"Ten minutes to four bells, sir!"

"Messenger! tell the gentlemen boat's going ashore in ten minutes; call away the first cutter!" Tratarata! the bugle sounds the call, the boatswain's whistle pipes. "Awa-a-y first cutter!" the command is heard forward, and the cutter's crew scramble out on the long boom, which runs from the frigate's side, and down the rope ladder; swinging from it, hand over hand, one after another the men drop into the boat in the water below, and bring it to the starboard ladder. Up from below comes a party of officers, all of them in their "shore-going" clothes—high hat and round, "swell" overcoat, or rough ulster, canes or umbrellas in neatly gloved hands—all on pleasure or business bent; they report "permission to leave the ship, sir!" and troop over the side to the waiting boat. "Coxswain, make the usual landing, wait ten minutes and return to the ship!" the officer of the deck commands.

"Aye, aye, sir! Shove off! Out oars! 'way together!" and the oars dip in the water and the boat darts away and heads for the shore.

"Strike four bells!" Ting-ting, ting-ting, the bell sounds the hour, and immediately following, the strokes are repeated on the other vessels of the squadron.



"The Iron Duke has shaken out her topsails."

"The English steamer is getting under way, sir!"

Up to the bridge jumps the lieutenant, to see that all is right and that our ship is in no danger from the movements of our neighbor.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Hand by the colors there!" as the merchantman, gliding slowly by, lowers his ensign in salute, and our flag flutters gracefully down the staff in acknowledgment. "What is it, my lads?" to a couple of seamen standing respectfully at the mainmast, and some request or complaint is listened to and disposed of, while, with hand to cap-peak, a marine orderly delivers a message from the chief. "Very well! Messenger! *where's* that boy? Here, you, sir, stay where you belong, d'ye suppose I've got nothing to do but to look all over the ship for you? Ask Mr. Dash to come here! After-guard sweeper! Mop up that place, and keep your eyes about you! Ah, Mr. Dash"—to the midshipman of the watch—"tell the guardship to send a boat!" and in a moment the signal flags are "wig-wagging" from the after-bridge, telegraphing the order to one of the cruisers, with the white, red-crossed guard-flag flying at the fore.

"Boat coming from the Portuguese flag-ship, sir! Flying two Portuguese ensigns, sir!"

"All right! Flag-orderly! tell the Admiral the Portuguese Minister of the Marine is coming alongside! Bo's'n's mate, there! 'Tend the sides! Six side boys! Look alive now! Turn out your guard, there!" From where I stand on the after-bridge, I see the Portuguese boat coming toward us. To American eyes it is a queer-looking craft, with carved and richly gilded prow, bright green sides, a sort of box at the stern, in which the coxswain stands, over the after-part a canopy, with the royal arms of Portugal painted on the top, under which a civilian, surrounded by a group of cocked hatted, epauletted officers, is sitting. Slowly, and with measured stroke of its sixteen oars, the barge comes alongside; the apprentices at the bottom of the gangway uncover and hand out the white, canvas-covered side-ropes to the grasp of the visitors; shrilly, in a long-drawn rising and falling note, the "bo's'n's" whistle pipes our guests over the side, as the Minister, followed by his suite, climbs the ladder and appears on deck, hat in hand, and responds to the greetings of our chief, who, with the captain and one or two other officers, stands at the gangway to receive him, while the marine guard presents arms and the band strikes up the Portuguese national anthem. Our visitors go below, where the admiral's hospitable cabin awaits their coming, and I look down at the sailors in the barge, short, brown-faced, sturdy-looking fellows, who, the moment their officers leave the boat, fall to smoking their cigarettes and lounge lazily on the thwarts, looking up curiously at the sides of the big Yankee frigate. Official visits are short, if not sweet, and with the same ceremonies, to which a salute from our guns is added, and during which the Portuguese boat lies motionless, and the Minister stands, uncovered, in the stern sheets of his barge, our callers return to their own ship, which lies some distance beyond us.

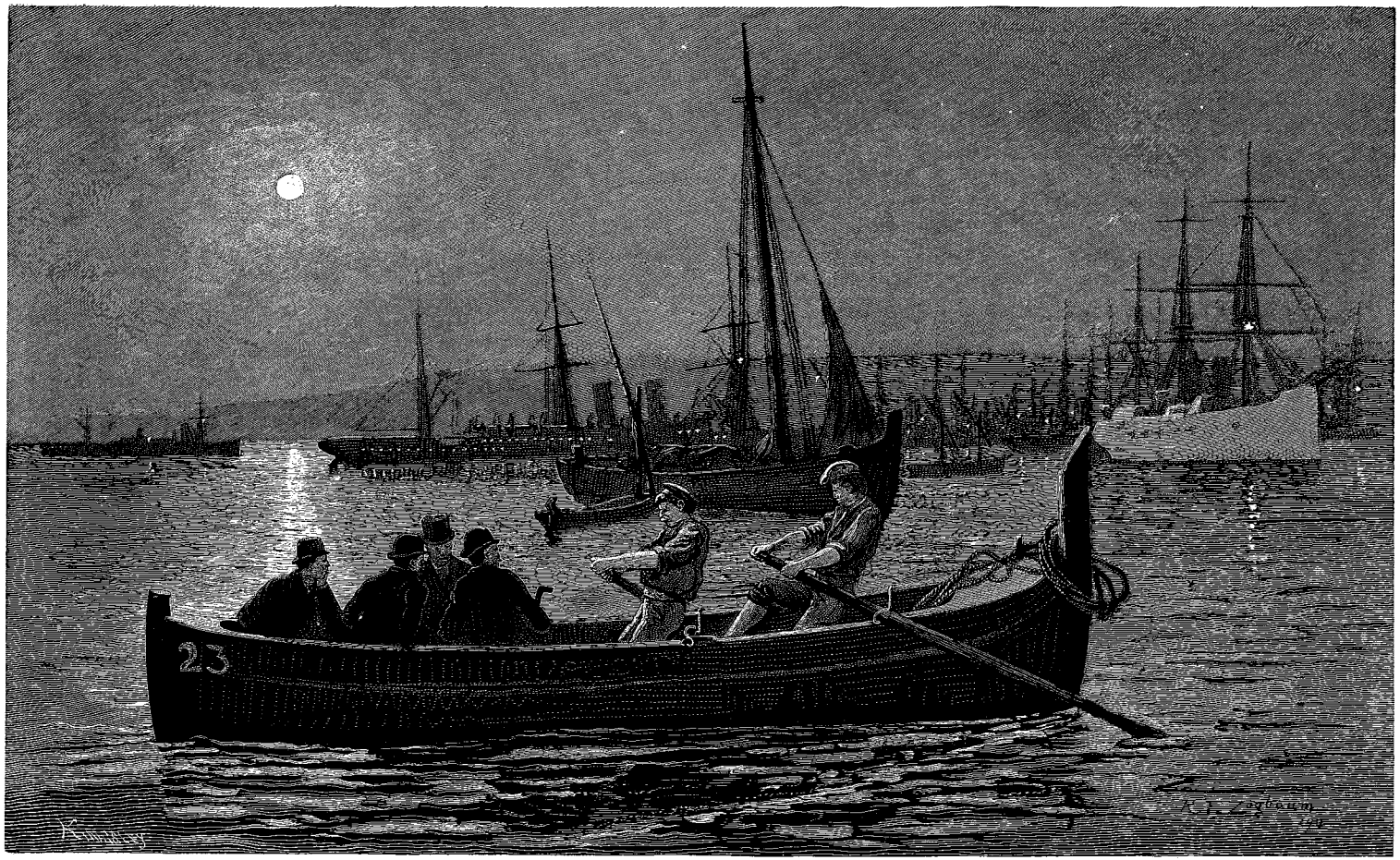
The afternoon passes, the officer of the deck always busy. Great lighters lie alongside, and hogsheads of olive-oil for the machinery are hoisted on board forward; shore- and ships'-boats come and go, merchant vessels arrive and depart, and from the busy city the same confused roar is heard all through the day.

A mist comes creeping in from the sea, and the sun, low on the horizon, sends a glare all through it, casting a dull crimson reflection on the water and reddening the buildings of the town. Slowly it sinks, until it hangs apparently motionless for a moment; then, as it disappears below the sea-line, the notes of the "Star Spangled Banner" ring harmoniously out in the still atmosphere, and, as the flag glides slowly down from its tall staff, officers and crew stand silently and with uncovered heads, in respectful salute to the emblem of the nation.

. . . . . .

The little group of belated Yankee naval officers, standing on the broad stone coping of the levee of the "Black Horse" Square, look in vain harborward for a ship's boat. Before them, black as ink against the moonlit sky, and thick as trees in the primeval forest, rise the masts of the lighters, moored along the shore; behind them, the huge statue of the black horse and his silent rider casts an enormous shadow back from the moon's rays on the smooth

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



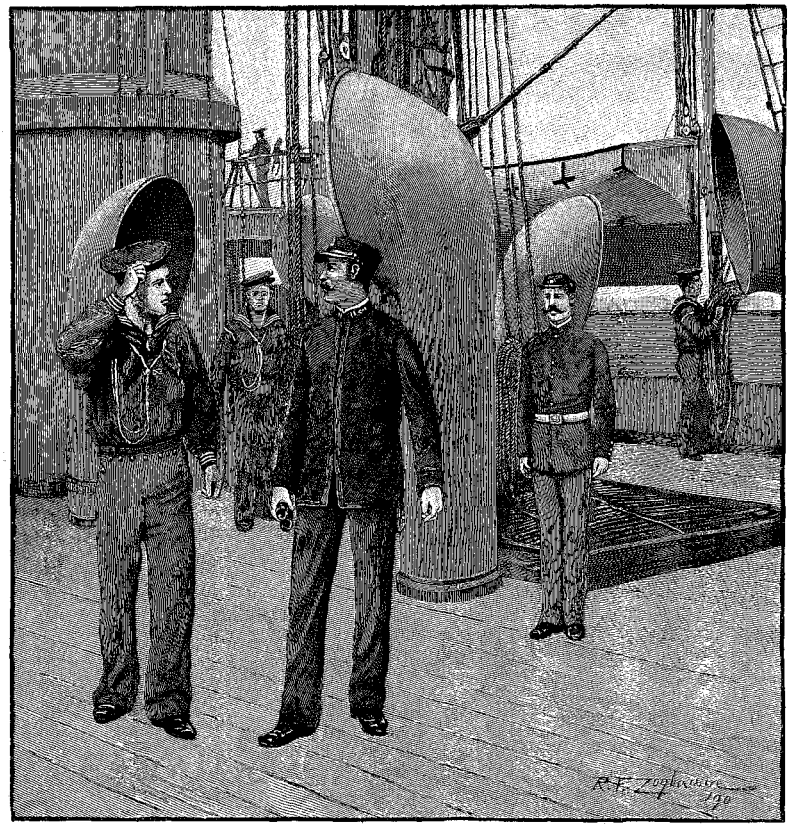
Officers Returning to the Fleet.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

gravel-covered surface of the wide plaza. Hardly a sound, save for the faint, distant jingle of a horse-car bell from under the huge archway yonder, where the long lines of street-lamps dimly burn in the shadow of the high houses. Tier upon tier, above the buildings bounding the square, ghostly white in the moonlight, rise the houses of the city, and, rushing silently on its way to the sea, but with swift, strong current, the Tagus stretches out to the black bluffs of the opposite shore.

Not a boatman anywhere; not a human being in sight besides themselves but the motionless sentry, wrapped in his gray capote, rifle-butt resting on the ground, and the fiery point of his cigarette glowing against the silhouette of the watch-box by which he stands.

There is another boat-landing further down the river, and, plunging into a dark, narrow side street, foul-smelling and damp, the little company makes its way over the slippery pavements. Here and there, at long intervals, a lamp, projecting from the side of some one of the tall houses lining each side of the street, casts a sickly gleam on the wet stones; now and then a light twinkles through the closely-shut blinds of some window, behind which the twanging of a guitar, the shuffle and stamp of dancing feet, the hum of voices are heard, and once or twice a glare from the open doorway of some low wine-shop cuts a luminous square out of the surrounding gloom. Some drunken seamen, singing a maudlin chorus, stagger by; in the gutter a dark shape of human form is lying, waiting, in the deep sleep of complete intoxication, for the coming of some patrol, to be carried away to the lockup. Other signs of misery and sin are evident in the flitting shadowy forms, occasionally met, slinking along the



The Officer of the Deck—always busy.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sides of the houses or appearing and disappearing in the black doorways.

A small square, another narrow but short street, and out to the water-front again, to a long, rickety wooden pier and a gray stone wall, from which a broad inclined space, paved with slippery, mud-covered stones, leads down to the water's edge. Numerous boats are moored here, and up from under the stone walls where they have been lying, a score of boatmen rush forth and with much eager gesticulation and noisy acclamation, proffer their services.

"Me John Fishboy, officer! Best boat for officer! All American officer know John Fishboy!"

"No, my boat best! John Steeck-a-mod boat best, captain!" and so on, through a whole category of nicknames, handed down from father to son for generations, ever since English-speaking seamen first landed on Lisbon's shores.

A great, high-bowed craft is quickly boarded, and, amid a chorus of "good-nights! Tek' me nex' time, officer! More come soon!" shoves off and out on the rushing bosom of the broad river. The night is bright with the full light of the moon, the tide is running strong, and the oarsmen sigh and pant, as they pull the heavy boat along. The water is covered with shipping—long, black-hulled steamers, sailing vessels from all parts of the world; huge iron buoys strain and pull at their fastenings, as the tide rushes, gurgling and sparkling in the moonbeams. Every port shining bright and a blaze of light from the cabin windows, a great passenger steamer towers high out of the water; silent and dark and grim, the warships lie at their moorings. Hark! mellowed by the distance, deep-toned bells are chiming. Over from steeple and dome, in moon-lit Lisbon, the solemn yet joyous notes float on the midnight air, proclaiming "On earth, peace, good-will toward men!" Christmas Eve! Ah, dear little ones in far away America! Ah! sweethearts and wives! God bless you, and a Merry Christmas!

. . . . . .

Away forward, clinging with one hand to the foretop-mast stay, and waving the red signal-flag with the other, a young apprentice is sending a message to the ship ahead of us; behind him, crouching among the loose folds of the jib and balancing his spyglass on the rail, his companion is awaiting the answer. The sun has just risen from behind the hazy blue line of the land, trending away before us over yonder, and the sea, a deep, rich purple, dark under the shadow of the coast and sparkling with glints of golden light, where the sharp-prowed cruisers, cleaving the clear waters, send rippling wakes astern, stretches with gently heaving, long, smooth swell, far away to the horizon's edge. The tall masts and great spars of the ships stand out in bold relief against the bright, pale-blue sky, the tall chimneys pour forth dense volumes of black smoke, which drift slowly off to leeward, until mingled with and lost in the air; miles away on our port bow, between the faint line of the headlands on either side, the Straits of Gibraltar open out, as we head for the African coast. We are in sight of the shores of two continents.

. . . . . .

The surf, breaking over the black rocks, throwing masses of snow-white spray up against the precipitous sides of the cliff; a tall, white tower, perched on a rugged crag—Judios Point, with its lighthouse, the only one on these barbarous shores. The coast rises, dark, forbidding, and abrupt, straight out of the sea; here and there the white walls of a house gleam out, in striking contrast with the luxuriant masses of dark-green foliage, with which the hillsides are covered, and, as we steam slowly into the bay the flat-roofed houses, the domes and minarets of Tangier rise over the old gray walls, running from the summit of the hills down to the water's edge. One after the other the ships come to anchor and float quietly at rest on the mirror-like surface, their shapely hulls and maze of spar and rigging reflecting straight down into the water. A glorious day! Like a fairy town of silver, Tangier lies basking in the sunlight; with graceful curves, the crescent of the beach borders with an edge of golden sands the azure of the sea, and melts gradually into the rich green of the rolling mounds beyond. Through the glass I can see a long string of camels moving

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"A little procession starts for the land."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

slowly along, and flying past them, an Arab on horseback, white cloak streaming out behind, gallops toward the town. Yonder comes a heavy fishing boat, nets heaped in a great pile, swarthy, bare-armed, bare-legged crew bending to the long oars. It passes close under our stern, and the wild faces of the fishermen look up at me, fierce, stern, imperturbable under the picturesque folds of turban or shadow of hood of brown burnouse. Other boats dot the surface of the bay, a white-winged felucca stands out to sea, her huge lateen sail swelling with the scarcely perceptible, soft, warm breeze from the land. From the shore, near the crumbling crenellated walls of the ancient fort, a barge puts out and goes alongside the flagship, and I conjure up visions of picturesque streets and buildings, moon-eyed and veiled beauties, and proud, gaudily attired Moorish cavaliers, of the caliph of Bagdad, and of Sheherazade and all the tales of the thousand and one nights, of the bazaars and the mosques, the stories and pictures of Oriental splendor and barbarous life I have heard of, and I hug myself mentally in delightful anticipation of the artistic treat in store for me, once the blood-red standard of the Moorish emperor should float at the fore-top-mast of the flag-ship, as her guns saluted his barbaric majesty, and the despised giaour from over the seas would be allowed to set foot on the sacred shores of the followers of the prophet.

I step down the ladder from the quarter-deck, pass along the waist and climb up to the forecastle, whence I can get a better view of the Chicago. The barge is still alongside and the men of her crew are lying on their oars; on the steps of the frigate's gangway a couple of officers are parleying with the occupants of the boat, who do not seem to have boarded the big ship. "Something is up," evidently, as I see the Moors giving way and heading toward the land again, while the dark-blue figures on the gangway ascend and disappear behind the bulwarks. I don't have long to wait to know what has happened. Instead of the crimson flag of Morocco, a bright yellow square of bunting is run up to the fore. Quickly following the lead of the flag-ship, out flutters the hateful emblem of the quarantine from the foretop-masts of the Boston and the Atlanta, of our own ship, the Yorktown, and, to my intense disgust and disappointment, I realize that "pratique" is refused to the American squadron, and that all my anticipations of a few days of artistic enjoyment of the life of a genuine Oriental city were but "dreams, idle dreams."

. . . . . .

In the Straits for a short run to the "Rock!" A levanter has been blowing, and the swell is heavy, and our gallant little craft responds to the rise and fall of the waves with impatient pitch and roll, as she speeds swiftly through the water in the wake of the other ships. On either side the land is in full sight. On the Spanish coast Tarifa nestles at the base of the hills, on the African shore the mountains of the Apes raise summits of strange and fantastic shape skyward, ahead the "Lion Couchant"—Gibraltar's famous rock—looms into view.

It is the first Sunday of the month; the crew is being mustered at quarters and the deck is crowded with "blue-jackets." On the port side the marine guard endeavors to preserve its steady military alignment, a difficult task with the rolling of the ship; the engineers, machinists, and firemen form in a double rank amidships, and the seamen, and "all hands" generally, stand at their appointed stations, while the executive officer reads out the naval regulations—the Articles of War.

At the davits on the starboard side, where the captain's gig hangs, the coxswain and one or two men are engaged in securing the boats.

. . . . . .

Sparkling in the sunlight, little dancing wavelets rippling over its bright blue surface, curving in a great horseshoe-like bend, the Bay of Gibraltar sweeps from the point over beyond Algeciras around to the great "Rock," thrusting its embattled walls in haughty grandeur out into the sea, as if in proud consciousness of Britain's mighty power. Gray sea-walls line the strand, roof-tops peeping over them; houses and barracks, turret and ancient stone defence climb the steep hillside; the Alameda, with its dark fringe of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

trees and level parade ground, lies beyond, and, bristling with barrack and battery, Europa Point—the New Mole projecting into the harbor some way inside of it—rises out of the water. Sheer from the verdure-clad incline behind the town, the naked rock rears its rugged outline, on its top the signal-tower, with its tall staff pointing heavenward.

Back in the bay off the Water Port, a tangle of masts and rigging, here and there black smoke-clouds rising from the funnels of some steamer, mark the anchorage of the merchant-men; dingy and dismantled, the coal hulks sit heavily on the water. Off the Ragged staff landing thousands of sea-gulls are flying, screaming about the war-ships riding easily at their moorings, the snow-white hulls of the American cruisers, "anchored at discretion," showing conspicuously among them.

Almost like yachts the latter look, compared with some of their huge neighbors, for some of Great Britain's strongest and most terrible sea-monsters are gathered in the harbor, lying on the waters as if in slumber, quiet and tranquil enough now, but ready to awaken at their mistress's bidding, and to vomit forth death and devastation from their steel-clad sides.*

Close to our ship is the Anson; on the other side the huge Benbow, with massive black hull and white, fortress-like superstructure, points the muzzles of her enormous guns over the tops of the turret-like barbettes on her decks, fore and aft, while from the ports in her sides the cannons of her batteries peer menacingly outward. A fringe of davits, from which here and there a boat is hanging, runs on both sides of her upper-deck, and her tall military mast, the tops bristling with machine guns, tapers aloft amidships. The Anson flies the flag of the rear admiral; on her quarter-deck scarlet coated, white helmeted marines are drawn up and the band is playing; alongside of her some boats are lying. Farther out in the bay the Iron Duke has shaken out her top-sails, and the canvas droops from the long yards in graceful folds, while from her bows to aft of her main-mast the white clothing of her crew, hanging there to dry, flutters from the clothes-lines. Over by the long stone wall of the New Mole the Northumberland and the Colossus, the vice admiral's ship, and a number of smaller vessels—despatch-boats and yachts—are moored, while back among the colliers the Monarch's white ensign marks the presence of a man-of-war in their midst. In the offing another naval monster, the Camperdown, is steaming slowly out to sea.

The harbor is alive with row-boats and launches of all kinds. Yonder, glancing like a fish half emerging from the water, comes a small, queerly shaped craft. Circling with astonishing rapidity around our ship for a moment, it darts off suddenly, and, with a swish and quick splash, something drops from its side. A moment later a dull report, a flash of fire, and a little puff of blue smoke, curling over the water some distance beyond us, where a little red flag waves from a sort of buoy floating there, shows us that the torpedo, that we have just seen launched, has reached its mark. With hum of forced draft and pant of steam and thud of rapidly revolving screw, a launch is passing near us, towing great man-of-war boats, filled with blue-jacketed sailors and red-coated marines, toward the shore. On the height, crowned with masonry work, over by the dockyard, clouds of white smoke, followed by sharp ringing reports and the shriek of the projectiles, indicates where a crowd of blue-jackets are

* Of the ships of the British Navy, lying at Gibraltar when the squadron of evolution visited that port in December, 1889, the Anson, Benbow, Camperdown, and Colossus are the most formidable. The Northumberland, Monarch, and Iron Duke are vessels of a different type from those first named. The Benbow, Anson, and Camperdown—the latter ship came into the harbor one day and left on the next—are similar to one another in general shape and construction, the Benbow having, however, an armament of two 110-ton guns in barbette—one in each barbette, fore and aft—and ten six-inch guns in broadside, while the Anson and Camperdown have two 63-ton guns in each barbette and six six-inch rifles in broadside. Their armor is compound, being of a maximum thickness of eighteen inches on the belt and fourteen inches on the barbettes. Their displacement is 10,600 tons, horse-power 11,600, and the speed attained about seventeen knots. Each is provided with five torpedo tubes and each carries a number of machine and rapid-fire guns in excess of the heavier batteries. The Colossus has a displacement of 9,420 tons, 7,500 horse-power, and a speed of about sixteen knots. Her armor has a thickness of eighteen inches on the belt and sixteen inches in the revolving turrets, of which she has two, each containing two 43-ton guns; her auxiliary batteries consist of five six-inch rifles in the superstructure. She carries torpedoes and rapid-fire and machine guns. The Northumberland, Monarch, and Iron Duke are all older vessels, less powerful iron-clads, but are still more formidable than any man-of-war of the United States in commission, or even planned, at the time of the writing of this article. No cruisers of a similar class to the American ships were in port during the stay of our squadron.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

at target practice with their howitzers, and out to sea beyond, columns of spray fly up in the air as the shells strike the water or ricochet across its smooth surface.

From some of the regiments forming the garrison of Gibraltar, and from all the British ships lying near us, many of the officers have come on board at various times to bid us welcome, and a party of our own people from the ward-room are leaving the ship for the purpose of returning the calls. As this projected round of visits is purely of a social nature, I gladly accept the invitation to accompany my friends, and we board the formidable iron-clads one after the other, and are received everywhere with great cordiality and frank hospitality by our transatlantic cousins. Perfect order and admirable discipline are visible on all the ships; the men of the crews are a splendid lot of fellows —uniformed in well-made, easy and perfectly fitting blue, and neat and clean as brush and soap and water can make them—heavier and perhaps slower in their movements than our own Jackies, but homogeneous and unmistakably British in character and with the national spirit and pride strongly developed in their natures.

The Benbow is sending out some of her boats for practice as we come alongside. Great heavy launches, filled with men and with machine-guns mounted in bow and stern, pull slowly out toward the harbor's mouth, the blades of their long oars dipping into the water in perfect unison and whirling circling eddies astern. On the decks of the big ship the monster guns—weighing each 110 tons, throwing, with a charge of 960 pounds of powder, a projectile 1,800 pounds in weight—seem more huge and terrible than ever, as we look up at them from where we stand, mere pigmies alongside of them, and we measure with our eyes the immense width of the vessel's beam, the tremendous steel walls of her sides, and "take in" with rapid glances, on our way to the spacious and comfortable wardroom, her thousand and one appliances for defence and offence, for the health and welfare of her crew.

A fine, hearty lot of men, these new-found friends of ours, of a common race and speaking the same tongue, evidently intending us to feel at home among them, and to carry away with us friendly impressions of the British navy.

And, as we pull away from the Iron Duke, the last of the ships we have visited, and look up her high sides to the genial, smiling face of her executive officer, who has been our host and entertainer during our short visit, and hear his cordial voice, as he shouts out kind words of farewell, I cannot help but hope that when we fight again—as sooner or later we must surely expect to do—it may not be with Englishmen.

. . . . . .

The basin at the Ragged staff landing is crowded with man-of-war boats, British and American. A number of officers from the different ships of our squadron are going ashore for a tour through the streets of the town, and are disembarking at the landing-steps. On the pier a battalion of sailors is drawn up, awaiting the command to enter their boats, lying in the water by the wave-lapped stone wall. All in white canvas and brown leggings, their rifle-butts resting on the ground, the sturdy English seamen "stand at ease," where they have halted after their shore-drill on the Alameda, and many of their officers, acquaintances of ours, nod and smile friendly greetings as we pass along the front of the battalion and out, over the drawbridge, through the stone archway of the gate and across the court, where ton upon ton of iron and steel shot and shell are piled in regular rows. On the ramparts above, pacing up and down with rapid stride, a scarlet-coated, white-belted sentry looks down upon us, and, with precise military salute, blue-coated gunners, swinging their short, slim canes, pass by us, as they stroll down to the landing to have a look at their seafaring comrades of the navy.

Some of us are bound for a walk in the town; others have calls to make or business to attend to, and so, breaking up into little groups, we go our separate ways. With one or two, who, like myself, have come ashore just to wander about anywhere that our fancy may dictate, I turn to the left and pass under

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

another stone archway into the street of the town, and we walk slowly along, looking in at the shop-windows and enjoying the street sights generally. The military character of the place is at once evident; a guard-house — with sentry in front and the men of the guard lounging on the benches in front of it— and the garden and buildings of the "garrison recreation rooms" are just inside the gate. Soldiers move about everywhere in the crowd that throngs the street. Red-coats and blue, sombre riflemen and linesmen, gorgeous in white and scarlet; scores of officers in civilian clothes, but betraying their calling in attitude and bearing; black-coated clergymen, sweet-voiced English-women, chubby little fair-haired children, bearded Moor and dusky Arab, and black-eyed Spanish girls, lace veils drooping from their shapely heads, stroll along the narrow sidewalks. By the post-office a little crowd awaits the distribution of the mail, among it mail-carriers from every regiment, mess, and battery in the garrison, and "cheek by jowl" with Tommy Atkins some of our own soldierly marine orderlies. Yonder comes a "buss" rattling over the well-paved roadway, passengers inside and out, a Jewish merchant from Morocco or Tangier, in voluminous turban and flowing garments, side by side with a Spanish priest. Hackney coaches, with small, sturdy horses; queer two-wheeled carts, filled with Spanish peasants; donkeys, panier-laden or with rider astride away back on their haunches; sunburned, roystering "blue-jackets" on liberty; ladies on horseback, dogs, ponies, more soldiers, pass and repass. Over the murmur of voices and the rumble of wheels I hear a distant, strange, wild strain of music, a stirring martial melody. Way off yonder over the heads of the people a glittering mass of burnished steel is moving toward us, and, as the crowd parts before its advance, and the wail of the pipes and the thundering roll of the drums re-echoes from the walls of the houses, a long column of white-coated, dark-kilted, bare-kneed Highlanders marches with measured, cadenced step and proud military bearing down the street. Splendid manly fellows they look, fit descendants of their war-like ancestors, and well has the regiment upheld—in storm and battle, in Northern snows and on Egypt's burning sands, in the fastnesses of their native mountains, and under the rays of the pitiless tropic sun—the honor and the glory of the old "Forty-second" the famous "Black Watch." With one impulse we turn about—my companions and myself—and tramp along with the troops, keeping step with them and to the music, as we were wont to do in our own distant land, years ago, in our school-boy days. We chaff one another a little about our enthusiasm, but there is a drop or two of hot Gaelic blood in the veins of all three of us, which the half savage screaming of the pipes has set dancing, and, as we glance along the "serried column," we are a little proud of the fact.

Out through the gate—the guard there "turned out" and presenting arms —the regiment marches, crossing over the wide parade of the Alameda and on past gardens and high stone walls, past cactus and aloe-hedges and giant geraniums, past pretty little tile-roofed houses, past batteries, covered ways, gates, and steps—up a steep hill to the broad space in front of the barracks. The ranks are broken, the men swarm into the building through the open doorways, and a party of the officers, on hospitable doings intent, seize upon us and carry us off, nothing loth, to the mess.

. . . . . .

High above us towers the summit of the "Rock;" with shriek and roar the wind tears through the air, hurling great cloud-masses in wild flight across the heavens, dipping down in sudden squall and furious eddy, lashing the water into whirling spots of foam, tearing off the wave-tops and chasing them in sheets of spray like drifting snow sheer across the bay to the opposite shore, outlined dimly against the sky beyond. The full round face of the moon glances out from behind the ragged cloud-edges and throws a frosty sheen of pale light, like a rippling river of diamonds, over the dark waves; on the ships at anchor around us lanterns swing in the rigging, fitfully flaring as the gusts strike them; the great iron-clads lie like rocks, immense, black,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

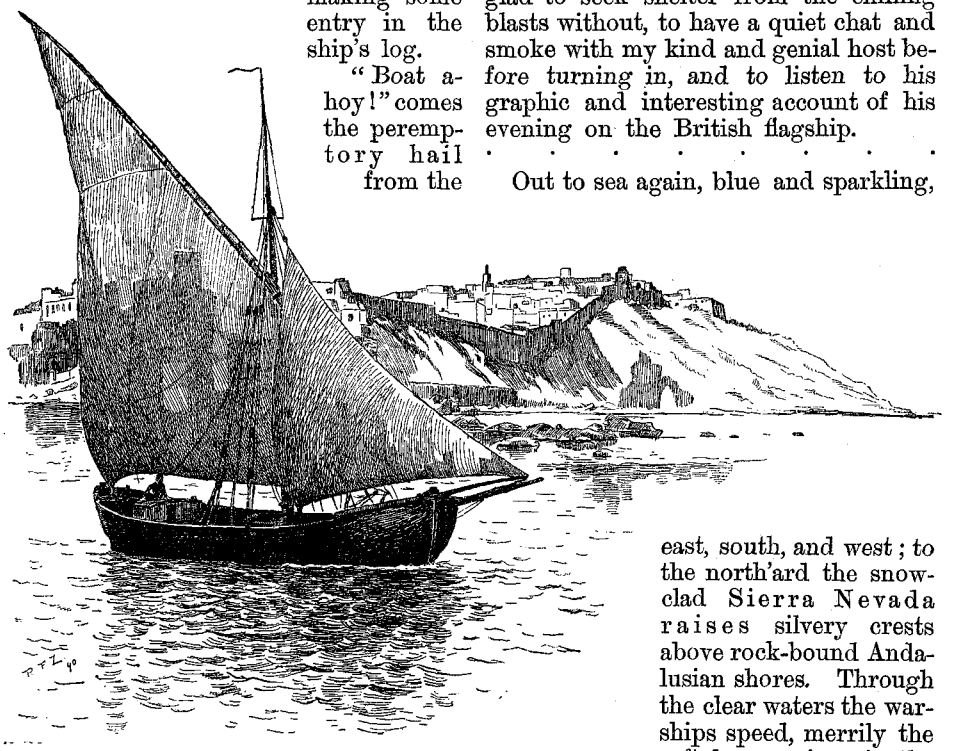
inert masses, their ports, here and there, glowing like bright round coals of fire; from the tall mast on the Benbow signal lights are flashing.

Up and down on the poop, from port to starboard, the quartermaster of the watch, the wide collar of his rough pea-coat turned up, walks to and fro. Forward all is quiet, a lamp burns dimly in the waist, and the canvas screening the hammocks swung under the forecastle deck shakes and trembles in the draft. The crew is sound asleep all save the anchor-watch. The first lieutenant is "yarning" with me under the lee of the bulwarks by the "rapid-fire" Hotchkiss, and the captain's orderly, leaning against the rails of the hatch by the wheel, is reading a book by the light streaming out of the open doorway of the little office on the port side of the deck, and where the officer of the watch is making some entry in the ship's log.

"Boat a-hoy!" comes the peremptory hail from the poop; faintly the response is heard: "Yorktown!" and a moment later the regular dip of oars, their rattle, as they are raised and placed on the thwarts, mingle with words of command. Instantly the officers hurry to the starboard gangway, the corporal of the guard stands at "attention" near the main-mast, the orderly whips his novel into the mail-bag hanging by the cabin door, and faces to starboard, heels together, straight and stiff as a ramrod, while a seaman holds an electric lantern, its long coil trailing behind, out over the steps of the accommodation ladder hanging at the ship's sides and at the foot of which the white gig, tossing up and down on the choppy waves, has just stopped, and where, watching his opportunity, as the boat rises on the crest of a wave, the captain jumps nimbly out onto the grating and ascends the steps. With a question or two to his officers, and a friendly good-night, he disappears through the cabin door, and I follow him into the comfortable room, glad to seek shelter from the chilling blasts without, to have a quiet chat and smoke with my kind and genial host before turning in, and to listen to his graphic and interesting account of his evening on the British flagship.

. . . . . .

Out to sea again, blue and sparkling, east, south, and west; to the north'ard the snow-clad Sierra Nevada raises silvery crests above rock-bound Andalusian shores. Through the clear waters the warships speed, merrily the soft breeze sings in the rigging and plays with the bright-colored signal-flags on the admiral's ship. Up to her main-yard long lines of fluttering bits of bunting, now spelling out one order, now another, fly



"A white-winged felucca stands out to sea."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

outward. Promptly the answering pennants wave from the other ships. Now —like things of life—the beautiful cruisers move in column; now, answering quickly to the touch of the helmsmen, they form line and push forward in battle order; now they wheel and again fall into column, obedient to the orders of the commander-in-chief, with the regularity and precision of troops on parade. Evolution after evolution are executed until the final command to resume sailing order and the squadron settles down, steadily steaming onward over the calm, smooth surface of the "Tideless Sea."

. . . . . .

Inside of a well-built, massive granite mole—a long breakwater running out from the shore straight across the bay, and on the rounded point of which a handsome stone tower is in process of construction—the ships of our squadron are lying in a long line, bows pointed toward the town, sterns moored by huge cables to immense iron rings in the walls of the pier. High hills, bare and rocky, not a tree visible on their scarred sides, are all around us, and emerge straight out of the sea on either hand beyond; batteries and forts crown the heights on every advantageous site, and great guns peep over mounds of earth, thrown up at the narrow entrance to Carthagena harbor. To the left and on our port-bow, as we look toward the city, are the long white buildings, the sheds, the dock and basins of the navy yard; following the irregular curve of the shore in our front and, around to the right, we see the walls of Carthagena, pierced by the double-arched gate of the Puerta del Mar, and in front of which well constructed stone docks are lined with shipping. Further along and outside of the walls a dingy mass of buildings—huge chimnies rising here and there from among them, and lighters and scows floating on the bay before them—mark the store-yards and mills for the ores from the mines in the region around, and which form the chief article of export of the place. Inside the walls a wilderness of roofs, from the midst of which a mound-shaped hill lifts its top, on which an ancient citadel is crumbling to picturesque ruin, stretches back into the country.

A swarm of "bumboats" surround the war-vessels, and a lively trade is established between their occupants and our Jackies, crowding in the port gangways. The boats are mostly heavy, cumbersome affairs, with high bows and heavy oars, and are loaded with piles of golden oranges, dates, loaves of Spanish bread, little brightly-labelled boxes of sweets, cigars or cigarettes. Red-capped, calico-shirted, sandal-shod Spanish bum-boat men—here and there a dark-skinned beauty of the softer sex—chatter and gesticulate, as they barter with the sailormen or protest vociferously when their too-eager advances are checked by the impassive masters-at-arms, seated or standing at the bottoms of the accommodation ladders, vigilantly guarding against the smuggling of contraband articles aboard. On the mole, groups of the townspeople, grave, serious-faced Spanish officers, with short befrogged, black blouses, high képis, and black-striped, baggy scarlet trousers, who have come out from the city to have a look at their visitors from distant America, stand gazing curiously at the cruisers. Man-of-war boats pull to and fro, and shore-boats — the "cabs" of the harbors—hover about, the boatmen looking attentively toward the ships in search of a possible customer.

The day is a perfect one, the water smooth as glass, and I beckon one of the boatmen to the port side, and, making my way through the throng of sailors, and stepping from one bumboat to the other, I jump aboard the little craft. By dint of signs and a few lame sentences of Spanish, eked out by equally crippled words of English on the part of my smilingly polite boatman, I strike a bargain for a pull anywhere about the harbor my fancy may dictate, so, settling myself comfortably in the stern-sheets, I grasp the tiller, and we paddle quietly out over the water.

Passing under the stern of an English merchant steamer anchored off the mole I direct the boat's course toward the dock-yard, meaning to catch as much of a glimpse of its interior as I can, although I fancy that I will not be allowed to enter the sacred precincts. How-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ever, I steer as near to the entrance as I think the boatman will go, and, as we approach the mouth of the great square basin, I "lay a straight course" across, directing the bow of the boat toward the little white guard-house on the edge of the pier on the town side. My boatman says nothing, although he glances over his shoulder once or twice to see which way we are pointing, so we are probably not breaking any port-regulations, and I take a good look of as much as I can see of the famous Spanish dock-yard. To my inexperienced eyes there does not seem much to hide from the gaze of the curious, although some of those long rows of buildings doubtless contain things the government might object to lay open to the gaze of foreign naval officers. There are ships and boats, hulks and scows, derricks and sheds, and in a dry-dock, back in the basin, a big frigate is standing, and, on platforms placed along her sides, white-clad workmen are busy. A man-of-war boat comes out from some side dock toward us, the officer in the stern glancing at us, as it darts out to the harbor. We row past the guard-house, by perpendicular stone walls running down into the water, and through a little fleet of fishing boats, until we come opposite the fine, massive walls of the landing stage near the "Sea Gate." Here, by the handsome flight of steps, the scene is an animated one. On one side fishing boats are crowded; bare-legged, bronzed-faced fishermen are unloading great round panniers filled with fish and covered with wet green sea-grass; carts, drawn by long-eared, round-bellied donkeys, stand near awaiting their freight from the boats. Rowing and small sailing craft of all kinds are coming and going; at the steps man-of-war boats and steam launches are lying, among them our admiral's barge with handsome crew, and I can see a little crowd gathered near some carriages on the stage. Blue uniforms, cocked hats, the glitter of polished brass and the sheen of gold lace contrast with the more sober habiliments of civilians, as the admiral with one or two of his staff and several gorgeously attired Spaniards enter the vehicles and are driven through the big gateway, and I hear the blare of a trumpet and the clash of arms, as the guard inside there turns out and salutes the commander-in-chief of Uncle Sam's squadron as he enters the town to pay an official visit to some high functionary of his Spanish majesty's government.

The custom-house officer, hands deep in the tail pockets of his uniform coat, stands, looking down at us as we row past, on the edge of the stone dock, where the big steam cranes are hoisting bales and boxes of merchandise from the lighter below; now, the water-side is crowded with shipping—ships, barks, schooners, lighters, and feluccas; here, we come to ship-yards, with vessels in all stages of repairing, and, as the water grows shallower, and the stone docks end with the walls of the city, boats and small sailing vessels recline on their beam ends, half submerged in the water on the shoals, and men are working on them, painting, scraping, or caulking the seams in their bottoms.

Slowly my boatman pulls along—stopping now and then to let me "take in" some interesting scene of harbor life, or to scrape a match on the seat of his velveteen trousers to light the Manilla I have given him, and which is constantly "going out"—and we pass along the entire water-front. Slowly we glide past a huge steam dredger, snorting and sighing, and, with clank of iron chain and soft "sough" of falling mud, digging out a channel there near the dirty and low but well built stone piers to the east of the town, where immense piles of ore — iron and lead, some copper—are being transferred, in baskets, by gangs of dark-visaged, half-clad stevedores, to great unwieldy square scows, that are pushed out, when loaded, to the steamers lying in the bay, which, the boat pointed for the squadron again, we are now crossing. Close alongside a large wooden Spanish man-of-war, nearly touching her boats, floating under her long booms, we move; past a big iron-hulled steamer, where we pause a moment to watch the stevedores handing up the baskets of ore from the flat-boat alongside. Plank stagings, each one wider than that above it, are made fast to the steamer's sides, and on each staging two

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

men are passing the heavy ore-filled baskets from the pile in the scow up to the pair above them, reaching down for the succeeding load, as soon as that preceding it has left their hands, and swinging their bodies and arms up and down with machine-like regularity.

The bumboats are still swarming about the ship, as my friendly boatman brings me alongside and I dismiss him, but soon the call to evening quarters resounds through the squadron, and the Jackies scramble back from the gangways and hurry to their stations, and the bumboats pull in irregular, long lines back to the town. The flags are lowered; soon the bo's'ns' whistles sound shrilly from ship to ship, piping to supper, and the lamps begin to twinkle over in the city, as the gloaming shuts down on us.

How perfectly tranquil and calm is the water of the bay, reflecting in its depths the lights, increasing momentarily in number all over the harbor; so quiet is everything about, as the evening shades gather closer and closer, while the light dies out of the sky in the west and the stars shine with soft brilliancy in the high dark vault of the heavens, that we can hear the shore sounds from the city way over in front of us, and the voices from the neighboring ships sound startlingly near us.

Hush! the band on the flagship is playing, and each one of us—grouped on deck to port near the breech-loading rifle—stands in dreamy silence, listening to the sad, sweet strains of the music.

. . . . . .

"Off Cape De Gatte I lost my hat,
And where d'ye think I found it?
In Port Mahon, under a stone,
With all the girls around it"——

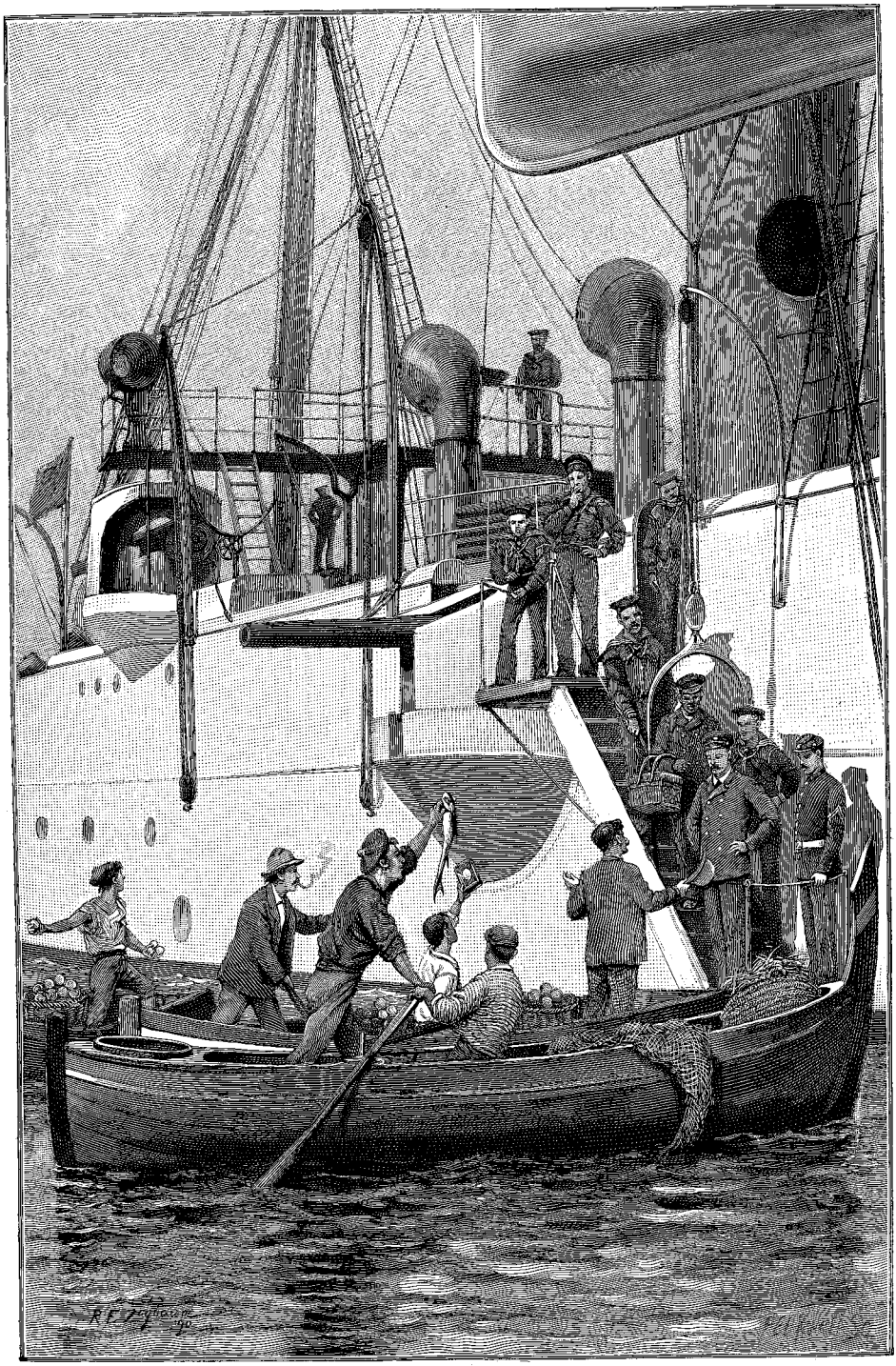
hums the "senior-watch," in the words of the old song of the midshipmen, as, slipping his arm through mine, he joins me in a walk on the deck. Cape Palos, with its lighthouse, is rapidly disappearing on the horizon, and we are bowling along in the twilight on a course laid straight for the island of Minorca and Port Mahon. In the van, the Chicago points her nose out to sea, and the rest of the squadron, each ship in position for night-sailing, follows the lead of the flagship. Forward, some of the men off watch are "skylarking," the smoking-lantern is burning, and Jackie is enjoying his evening pipe, while on the high narrow bridge the officer of the watch strides to and fro. Aft, on the poop by the rail at the stern, a marine stands on guard near the patent life-buoys, and the quartermaster, a handsome, trim young sailor, with the white knot of the apprentice-mark—indicating that he has passed through the ratings of apprentice in the navy, stitched on the breast of his shirt, is stowing away some articles, rolls of bunting, signal flags, and the like, in the white locker near the cabin skylight. We touch our caps to the captain, coming up the starboard ladder, and he joins us in our walk, chatting over the events of the day, and the prospects of a clear night and a rapid run to Port Mahon.

By and by, as the air grows chilly up on deck, one after the other we drop below. Perhaps the evening is spent in the wardroom over a quiet game of whist, or chaffing and laughing about some episode of our daily life on shipboard. Or in the comfortable cabin, the soft light of the electric reading-lamp over the table, the captain and I sit reading some work from the ship library, pausing now and again to discuss some matter we have come upon in the books we are reading, or to converse about people and things of mutual interest to us. Then, as my host bids me good-night and enters his state-room, I too seek my comfortable nook, prepared nightly for me by the well-trained cabin boy, and turning off the light by the touch of a button over my head, I roll myself in my blankets, and soothed by the musical rippling of the water along the ship's sides and the song of the sea-breeze in the rigging, I lie there, warm and snug, hearing with half-conscious ears—as sweet, health-giving slumber gradually steals over me—the occasional footfall on the deck above, the muffled stroke of the ship's bell, tolling the hours of the watch, and the answering cry of the lookouts, holding faithful vigil over their sleeping shipmates.

. . . . . .

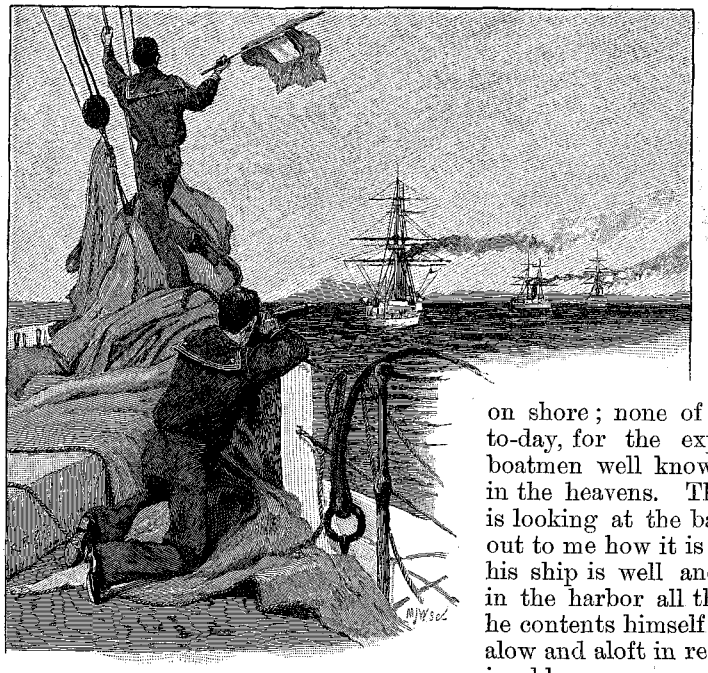
Dear in memories of bygone days, to the heart of many an old sailor, is

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



"A swarm of bumboats."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Signalling.

white-walled Port Mahon. Safe from the mistral's savage winds, many an American cruiser has rested in its land-locked harbor in the old days of the sailing frigate; here "Old Ironsides at anchor lay" once years gone by; here, when the baby republic first sent its star-sprinkled flag out to greet the older nations and to enforce respect for and recognition of its rights by barbarous pirate kings, Decatur and Preble came; here Porter lived and wed his bride; and from Minorca's sea-girt land came the father of "the Sea King of the sovereign West," brave, loyal, old sailor Farragut. And here to-day is anchored the first squadron of the new American navy, the best equipped, the finest, and most formidable ships the United States has ever sent to foreign parts. And once more does Port Mahon justify its old reputation, for over behind its sheltering hills the storm is gathering to sweep over the sea and scatter havoc in its path.

The air is still. Not a breath of wind disturbs the placid surface of the harbor; the pennants on the mainmasts hang straight down, the flags are motionless on their staffs. The sky is cloudless, but the blue has died out of it, and it shows one unbroken expanse of grayish-white. From the sea a small felucca is coming toward us, sails furled and crew working at long sweeps, pulling in harborward. Over by the sea-wall the fishing-boats are hauled up on shore; none of them have put out to-day, for the experienced Minorcan boatmen well know the warning signs in the heavens. The "first lieutenant" is looking at the barometer, and points out to me how it is steadily falling, but his ship is well anchored, his position in the harbor all that he can desire, so he contents himself with seeing all snug alow and aloft in readiness for the coming blow.

Now, over in the sky, where the sun shines weakly, a wall of gray clouds is rising, slowly, almost imperceptibly. Still there is not a breath of air, but there is a confused, indistinct murmur around about us, and then the light of the sun is obscured, and a cold shadow spreads over land and sea. The pennants, the flags move slightly, waving their ends sluggishly, then hang listless again. It has grown cooler, and a drop or two of rain falls on the deck. Thicker and more threatening grow the clouds, and now cover the sky, save a long narrow streak on the horizon. Dust is rising in the air over the land, and, hurrying before it, flocks of pigeons fly down among the houses of the town. The murmur in the air has increased to a moaning, sighing sound, and suddenly, with rush and roar and shriek, striking the water as if a solid mass, and shaking our ship from stem to stern, causing her to heel before its mighty onslaught, the mistral is upon us.

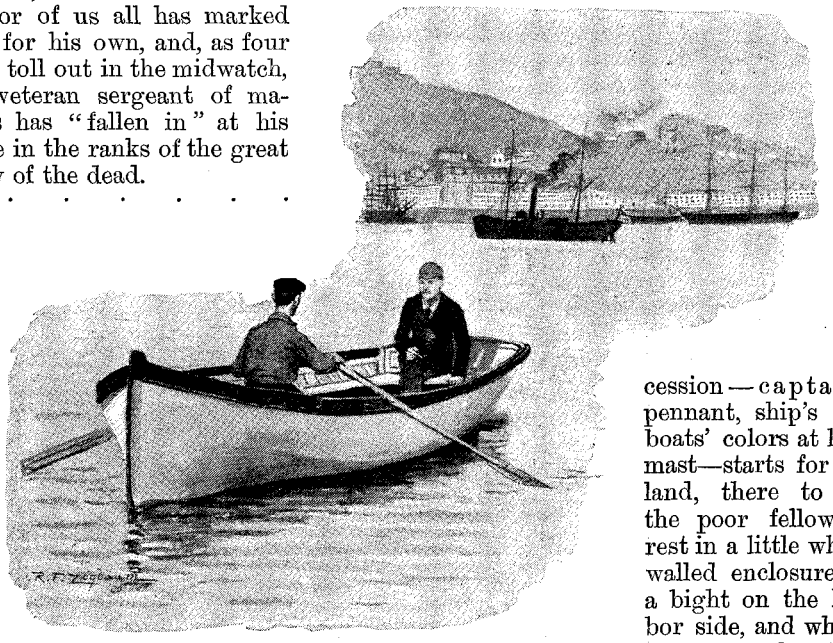
All night long the tempest rages, all night long our ship trembles and heaves, bravely holding on by her stout anchors, while the furious wind tears at her, as if striving to pull her bodily from the water. As the day comes the pale light

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

shows the storm at the height of its fury. Our consorts—topgallant masts housed, halliards curving out stiff as steel, the Admiral's little blue flag standing out like a board from the mizzen—are half hidden in a cloud of flying mist, as they rock on the wind-swept water, straining like living creatures at their huge anchor chains. On deck everything is wet and dreary. The men on watch, clad in their rain-clothes and dripping with mingled rain and sea-water, seek such shelter as their duties will permit, or tramp heavily about the deck in their clumsy sea-boots, bending their heads to the spiteful blasts. Laboring into the harbor, comes a French merchant steamer, with main-topmast gone and the splintered stump of her foremast showing on her deck, and we are thankful that we have a safe refuge in the "harbor of Mahon."

Safe and sound are most of us, but, in his narrow cot forward in the ship's sick-bay, a brave man, a gallant soldier, is slowly dying. He is fighting hard for life, but the dread conqueror of us all has marked him for his own, and, as four bells toll out in the midwatch, the veteran sergeant of marines has "fallen in" at his place in the ranks of the great army of the dead.

. . . . . .



A Cab of the Harbor.

The storm is over and the sky and sea are blue and smiling. There is a strong breeze blowing, and the clouds fly fast across the heavens, but the beautiful green hills of Minorca are clear to the view, and flecked with ever-changing masses of sunlight and shadow. The harbor is almost bare of shipping, the cruisers have sailed, all but the pretty Yorktown lying, quiet and still, at her anchorage.

Quiet and still seems everything on our ship, for an awful presence has come on board during the night and has taken shape there, under the drooping canopy of flags amidships, in the coffined form of the dead sergeant.

"A-a-ll hands bury the dead!" the solemn call of the boatswain sounds through the ship. Quietly and in respectful silence the crew assembles, the officers grouped to starboard, and, as the chaplain reads the simple service, rough faces soften and heads are bowed in reverential awe. The bearers lift the coffin, the marine-guard present arms, and the body is gently lowered over the side into the cutter lying there to receive it, while officers and crew take their places in the boats, and a little procession—captain's pennant, ship's and boats' colors at half-mast—starts for the land, there to lay the poor fellow to rest in a little white-walled enclosure on a bight on the harbor side, and where, gone before him long years ago, many a gallant sailor—English and American—lies, awaiting the last call for "All hands."

Quietly and gently the dead man is lowered into his last berth; with spout

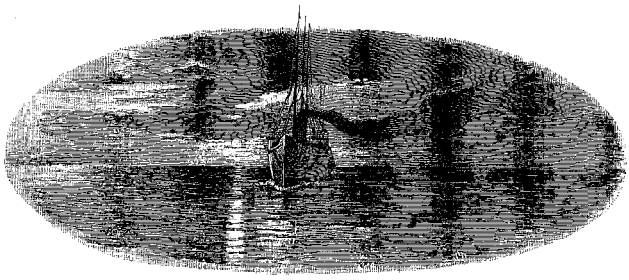
PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of flame and circling cloud of smoke the rifles render martial honor, and then, in the sad, sweet music of "taps," the bugle sounds the sailor-soldier's last good-night.

. . . . . .

All hands up anchor! Cheerily the boatswain's whistle pipes again, cheerily the men tumble to their work. Up to the peak of the staff glides the ensign, up come the boats with a run. Cheerily, lads, cheerily! Farewell, shipmate, rest peacefully in the grave where American sailors have placed you! Good-by, friendly old Port Mahon!

Out to the rolling waters again. Hurrah! how our little racer settles down to her work, like a thoroughbred on the home stretch, almost bounding over the waves under full power of her engines. Cheerily, lads, cheerily! Let the dead bury the dead, the sea, the dancing, sparkling, merry blue sea, the fresh breeze, the bright sunlight are for the living.



REVISITING A GREEN NOOK.

By Annie Fields.

The sky is clear, the voice is fresh
  Of waters beating on the shore,
And nature to my heart her heart
  Now lays once more.

Mindful of summer days long past
  She will not show a weeping face
But cheerful with remembered joy
  Gives gladness place.

The light slips down from other skies
  And mingles with the blue of this;
I hear another music through
  The sparrow's bliss.

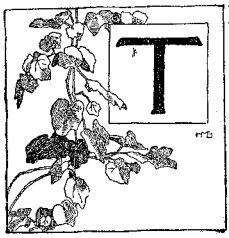
The light of an unfading love
  Paints the gay grass and frames the sky;
And hides the moon in morning seas
  And cannot die.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

NATURE AND MAN IN AMERICA.

SECOND PAPER.

By N. S. Shaler.



THE effect of the Appalachian Mountain system upon the distribution of slavery, and consequently on the political and social history of this country, was of great importance. Slavery, as is well known, depended, for its extension, on two important crops, both of which demanded a large amount of cheap labor, and afforded articles which commerce greatly demands. The institution rested on the industries of tobacco and cotton growing. Only where one of these crops could be profitably tilled did the institution ever firmly establish itself. A glance at the map will show that the Appalachian system of mountains widens as we go southward from Pennsylvania, until it occupies nearly one-fifth of the Southern States, extending southward so as to include half of Virginia and North Carolina, a considerable part of western South Carolina, much of Georgia, Tennessee, and Kentucky, and a part of Alabama. In this section the character of the soil and form of the surface, and the nature of the climate, make the land unsuited for the extended culture of either tobacco or cotton. The result was, slavery never firmly established itself as an economic institution in any part of this vast territory. Here and there in the more fertile valleys a few slaves were employed, but there are counties in this area where a slave was never held, and where, to this day, a negro is so great a curiosity that people will journey miles to behold him. The natural result of this distribution in the negro population was that the mountain districts of the South were separated in their political motives from the plain country. When the rebellion occurred the Appalachian country was a region where disaffection toward the Confederacy prevailed; to a great extent the men cast in their lot with the North, or at least gave their sympathies to the Federal cause. The peoples of eastern Kentucky and Tennessee and western Virginia—and generally those of western North Carolina as well—recruited the ranks of the Federal army. Some of the counties of eastern Kentucky sent more troops to the Union forces than the voters who ever appeared at an election in those districts.

Owing to these conditions the Appalachian upland region divided the South in a political and geographical way, and served greatly to enfeeble the resistance which it opposed to the Federal arms. About one-fourth of the population of the slave-holding States lay in this upland country. Not only did this district afford over a hundred thousand soldiers to the Federal army, but the prevailing sympathies of the population were with our troops in every stage of their work. It is to this non-slave-holding element of the Appalachian districts that we owe the adhesion of Kentucky to the Federal cause and the effectual sympathy of half of the Old Dominion, now known as West Virginia. But for the existence of this extensive territory inaccessible to slavery and the consequent weakening of the South, it is doubtful if the Federal arms would have been able to prevail in that momentous contest.

It would be possible to extend these considerations concerning the influence of geographic features on the development of European settlements and the history of our peoples on this continent. Analysis would show that almost every feature, every river and plain, had its effect in controlling the distribution of the population in its westward march. It would also be easy to show that the climatal characteristics have vastly affected the political conditions through the character of the crops which are tilled. Thus, for instance, the Western prairies,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

which apparently owe their origin, as before remarked, to the Indians' habit of burning the plains to favor the spread of the buffalo, greatly affected the distribution and the prosperity of our population. The forests being removed from the prairie countries, they were ready for the plough, without the arduous labor required to clear the woods away. Possibly owing to their long deforested condition, the soil greatly abounded in the elements fitted for the production of corn crops. The climate excluded the profitable culture of cotton and tobacco, the staples on which slavery rested. The result was the rapid economic development of that region through the export of grain and the consecration of the country to the interests of free labor. History shows us that it was only narrowly that the States of Illinois and Indiana escaped the institution of slavery within their territories. If the isothermals had been drawn one or two hundred miles farther north, so that the southern crops would have prospered in these States, the evil of slavery might well have been fastened so firmly that it could not have been uprooted from our State. Manifold and interesting as are these considerations, we must turn from them for a glance at certain other features dependent on the structure of the continent which have had a profound influence on the development of our American population, and are to have yet other important effects in the high time to come—those which arise from the distribution of the soil and the deeper-lying mineral resources of the national area.

In his savage state man's dependence on the under earth, or even upon the soil, is very slight. It is true that in a fertile country the game is commonly somewhat more abundant than in a region of scanty soil, but differences in this regard do not greatly or immediately affect the people. With the invention of agriculture dependence on the soil begins; with the needs of tools a slight relation with the metallic resources of the under earth is instituted. With each step in the further development of the arts, man's interest in the crust of the earth increases. At first the non-precious metals—iron, copper, lead, and zinc—are sufficient for his needs; but in ever-increasing ratio with the development of civilization this dependence on the under earth is augmented. The greater portion of these geologic materials are either prepared for the use of man, or brought nearer to the earth's surface by the process involved in mountain-building. Thus the solar force of past geological ages buried in our coal deposits depends for its formation upon the changes which have brought it into the state of coal, as well as for the uplifting which brings it into the surface of the earth, to a great extent, on the forces which build mountains. The development of the Appalachian axis, as well as the similar processes which led to the formation of the Cordilleras, has produced and revealed in this continent an ample store of mineral materials suited to the needs of man, and has placed these stores in remarkably advantageous positions in relation to the regions suited for the purposes of agriculture.

In general the continent of North America is divided into three regions of arable land and three great mineral districts. Along the Atlantic coast and east of the Appalachians there is the tolerably fertile country of the Atlantic slope, extending from Florida to the St. Lawrence. The agricultural capacity of this district compares favorably with any equal section in the world. In the Mississippi Valley we have, considering the circumstances of the soil and climate, the largest and most fertile area, the area best suited to maintain a great body of our English race which the world affords. On the Pacific slope we find a third arable field, containing less area than the Atlantic territory, but with great agricultural possibilities. Dividing these three fields, and facing them on the north, we have the mineral districts. On the east the Appalachian country, abounding in coal and iron and considerable quantities of other important metalliferous or mineral deposits. In the Cordilleran districts we have, as far as known, the most plentiful deposit of the more important of metals, except of tin, which the world affords within equal area. On the north, in the Laurentian field lies a third mineral area extraordinarily rich in iron, phosphates, copper, and other valuable earth materials. In

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the great valley between the Cordilleras and the Appalachians, and, to a certain extent, on either shore-land, there are extensive beds of coal and important deposits of the fluid fuel petroleum, as well as of natural gas. This distribution of agricultural and mineral resources of this country is singularly favorable for the conjoint development of tillage and of mining, and for a vast interstate and foreign commerce, of which we, in our day, see but the beginning.

Before we proceed to consider the details of this natural order in the distribution of the earth resources of North America, we must turn aside for a moment to note the effect of modern economies in producing local peculiarities in human life. In the earlier states of man the nurture places of the races depended for their effects on the presence of strong geographic barriers—seas or mountains—which might fend the people from the interference of their neighbors, and thereby enable them to undergo the nurturing process which led to racial or national peculiarities. It is easy to see that the effect of commerce is to destroy these boundaries. The Alps, once a formidable barrier, are now pierced by tunnels, and are as easy of passage as the plain lands to the north and south. A season's earnings will now carry a man to the farthest civilized countries. But while commerce and the industries on which it depends have served to break down the natural barriers between peoples, they have served also, in a singular way, to create other limitations of habit and action which are likely to have even greater influence in the cradling of people than the old geographic bounds. It is evident to any one who has studied the varying effects of occupations, that the herdsman, the soil-tiller, the manufacturer, the miner, pursue employments so different the one from another, that men who follow them become in hand and mind specialized and unlike those of other occupations.

A German phrase has it that a man is what he eats; we may better say that a man is what he does; and that persistent doing in one line of deeds for a few generations will serve to give character to a population in much the same manner as a thousand years of isolation in a peninsula or an Alpine valley. Within the limits of either of the great classes of occupations noted above we find a wide range of diversities dependent on the peculiarities of the employment. Thus the population employed in the iron furnaces or rolling-mills differs widely in character from the folk employed in weaving and spinning fibres. The watchmaker and the shoemaker are both, in a sense, manufacturers; but the mental training which the two receive, and the consequent habits of life, both moral and physical, differ in a very wide way. The orange gardener of Florida and the wheat farmer of Nebraska pursue employments which differ entirely in their nature; the one labors throughout the year with his tasks, the other is subjected to the peculiar influences which come from seasonal activities; the wheat field of the Far West calls for action on but four months of the year; for the rest the workman is but a drone, unless he turns his attention to other tasks than his field affords. Indeed, the variety of character which occupations give to a population is much greater than that which in the same time could be instituted by any purely natural circumstances.

Although North America is almost destitute of the geographic divisions which in the earlier conditions of man served to diversify the character of peoples, the diversities of occupation are easily and necessarily instituted in the great American mixture of folk. Varieties of men as characteristic and as important in the history of our people as those which nature has produced in the folk of the Old World, divisions resting upon modes of activity bred in men by occupations and by habits of thought which occupations engender, will at once unite and diversify the people of this country, linking particular districts in one interest and habit of thought and actions, and separating those districts on the basis of industry from the folk who pursue diverse habits of life.

I now propose to make a general review of that part of this continent which is occupied by English-speaking folk, with the hope that we may thus obtain a basis on which to foretell, in a general way, the divisions of character in our

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

people which are likely to arise from the varieties of their occupation.

We have already noted the fact that the continent of North America is divided into three great mineral and three great agricultural districts. We may profitably add to the consideration the fact that there are three regions of a maritime sort where the people have experienced the important effects of close contact with the sea. These maritime districts consist of the North Atlantic shore, from Cape Hatteras to Labrador; the Pacific coast, from Alaska to the Gulf of California, both regions abounding in good harbors; and the third, the southern coast, from Hatteras around Florida to Mexico, which is not well provided with ports, and where the maritime conditions are less important than along the other shores. Despite the imperfection of the harbors from Hatteras southward, the coast of North America is, on the whole, the most completely maritime of any continent except Europe. Its landlocked waters, including the great lakes, are of vast extent; the total number of ports possibly exceeds that of the Old World. It is clear, therefore, that we are to have in North America two great maritime districts, and a third in the south, of less importance, to add to our list of national labor-fields.

In this general survey we have to consider the natural-employment divisions of this country and endeavor to forecast their economic history and the quality of the population which their condition is likely to induce. This task may advantageously begin with the New England section, a region which, by its geographic as well as its economic conditions, is one of the most specialized parts of North America. In our considerations it is not desirable to take an account of the arbitrary line which now separates Canada from the United States. Whatever be the political future of these countries, there can be no doubt of their destined economic and social unity. The several questions which now separate them are of such a nature that we may be sure they will in the end lead to a closer union.

The New England section of North America, including as such all the tillable ground from Newfoundland to the Hudson, is well named. On the whole it more closely resembles, in its conditions of shores, the surface and soil, the islands and peninsulas of northern Europe, in which our Northmen folk developed. The geological history of the two regions is very similar. Both are mainly composed of ancient rocks, and both these ancient rocks have been much crumbled by the mountain-building forces. Both have been subjected to a vast amount of glacial wear; their soils have certain common qualities given by ice action. In both we have a close combination of agricultural and mineral resources.

The New England section of North America, including the St. Lawrence district in that field, is essentially the maritime portion of North America. Within its limits we find the largest amount of shore line for a given distance along the main coast of the continent. There are more deep bays and fjords, and larger islands, than along any other portion of the Atlantic border of the continent.

The surface of the New England and Laurentian district, throughout its whole extent, may be described as mountainous. Save in the southeastern portion of the country, every part of the field contains decided mountain ridges worn to their roots by the recurrent action of glaciers and sea, but still giving the surface a truly mountainous character. The result is here, as elsewhere, that in a large part of the mountainous districts not far from one-half of the whole field is sterile from the lack of sufficient soil, or fit only for the growth of forest trees. This feature insures to the district the permanence of the timber industry.

The tillable soils of the New England and Laurentian field lie mostly in the valleys between the important mountain ranges; they are glacial soils, formed of the materials brought to their place by ice action; they have certain peculiar characteristics. When first won to the plough they are of only moderate fertility. Largely composed of pebbles and bowlders the amount of plant food they contain does not compare with that which is held in the prairie soils, where for

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ages the conditions have favored the preparation of the materials required by vegetation. They have, however, the peculiarity that they gain in fertility by skilful tillage, even without artificial fertilizing, while the prairie ground steadfastly diminishes in its productiveness under cultivation. All the pebbles in our stony fields, except those composed of quartz, are constantly yielding some part of their materials to refresh the soil. A pebble of granite, or of the kindred crystalline rocks, contains considerable quantities of potash, soda, lime, and phosphorus, substances which are most rapidly brought into the state where they may be appropriated by plants when the soil is used by man.

At present the tide of immigration sets from New England to the West, where cheap lands with their great though unenduring store of fertile materials await the settler. This stage in our history, where cheap but unpermanently fertile lands are to be had almost for the asking, is now nearly passed by. In another generation these opportunities will no longer exist, and it is thus likely that with the relative increase in the value of soil products the agricultural position of New England will be improved. From a somewhat careful study of the New England States, as well as a portion of the Laurentian district, I have become convinced that this northeastern field has far greater agricultural possibilities than is commonly supposed. A very large part of the neglect to which these fields have been subjected is due to the withdrawal of the population from the fields to manufacturing life, to occupations which for a time afforded a larger remuneration than the tillage of a stubborn but not unfruitful soil.

When the Western country is fully occupied through immigration, and the natural increase of our native people, there is every reason to believe that agriculture in the northeastern part of our country will attain to something of the relative importance which it had in those districts a century ago. This seems the more probable when we note the fact that a large portion of the richest soils of New England, viz., the swamp-lands, were never won to the plough. In the Laurentian and New England district we have not far from ten thousand square miles of morasses, areas which demand a considerable expenditure of capital before they can be brought to the tiller's use, but which, when so won, afford fields of surpassing fertility. Up to the time when the great West was opened to settlement, the population of New England had not become dense enough to drive the people to this class of soils; but with the inevitable crowding of our American population which the next century is to bring about, these swamps will be drained, and by their drainage a vast area of excellent land will be won to tillage.

This northeast section of the continent has a fair share of subterranean resources, including a wide range of metals and a very plentiful and varied store of building materials. Last of all it is peculiarly the seat of the greater water-powers of this country. This abundance of streams suited for mechanical purposes is due to the relatively considerable height of the district and the frequent great thickness of the glacial deposits in which the rain-waters are retained and slowly yielded to the streams.

It is easy from the facts stated above to foresee that, in the future, the New England district, including, as we have done, the region about the St. Lawrence, is to be the seat of the most varied occupations. No other part of the United States so well combines the conditions for maritime, agricultural, mining, and manufacturing labor as this territory. Further variety in the life to come is insured by the remarkable mixture of races in this territory. In Nova Scotia we have perhaps the largest body of Highland Scotch outside of the mother country, and in this region where this blood is so little mingled with that of other lands that the Gaelic language is the common form of speech. In lower Canada there are several large settlements where the people are almost entirely derived from northern France. New England proper has many areas where Irish Celts and their descendants outnumber the original New England stock. Here and there there are considerable colonies of other peoples, Scandinavians, Germans, and Portuguese. At present it seems likely that the peo-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ples presumably of Celtic stock — the Irish, Canadian-French, and Highland Scotch — will, in another fifty years, greatly outnumber the original New Englanders. So far, however, the immigrants from continental Europe have in the main betaken themselves to the cities of New England and have shown little disposition to obtain control of the soil. The rural neighborhoods are still characteristically English, and, for all that we can see at present, bid fair to remain so for a hundred years to come. Although much of the strength of New England has gone West to found new States, enough remains to insure the perpetuation of the original stock, so that we may look forward to another element in the diversification of New England conditions wherein the towns will be largely composed of descendants of foreigners and the country districts of folk of English blood.

South and west of New England we have another characteristic group of States in New York, Pennsylvania, New Jersey, and Delaware, a region tolerably well marked by its conditions of surface and climate so far as those affect the development of man. In this district, which is about as extensive as the New England and Laurentian district above described, we have an area in which the maritime conditions are less pronounced, the agricultural resources—as determined by the soil and climate—proportionately more considerable, and the mineral resources very much larger than in the more northern realm. While in the New England section, practically, the whole of the surface is mountain built, and not more than one-third of the area is suited to agriculture, in the New York district, as we may term it, the mountainous sections occupy not over one-third of the total area, and the soil is, on the whole, much more tillable. The mineral resources of this field, particularly those which are applied to the production of power—coal, petroleum, and natural gas are the staples of its geological wealth. Including a small portion of Ohio, we have in this section the largest store of these materials that is afforded by any equal portion of the earth. On the other hand, while the power derived from ancient sunshine and stored in the form of carbon in the rocks is more plentiful in this district than in New England, the immediate energy of water-power, due to the heat of the present day, is less available than in New England. Except at Niagara Falls, where there is a vast, but as yet unusable store of river energy, this district, owing to the relative thinness of its glacial accumulations and the consequent impermanence of the rivers, presents no such advantages to the manufacturer as are afforded by the New England streams.

In general, the physiographic conditions of this group of States afford the basis of a very varied life. The different forms of activity are likely to be only less closely associated than in New England. The natural manufacturing centres are widely distributed, and the mineral resources lie well in the body of the tillable land.

South of New Jersey and Pennsylvania we have a somewhat characteristic group of commonwealths, including Virginia and the Carolinas. This, which we may call the Virginia group of States, differs in many ways from the two northern associations which we have just considered. The first and most important peculiarity consists in the character of the soils. The whole of New York and a large part of Pennsylvania and New Jersey have had the character of their soils determined by the peculiar grinding of the surface and distribution of the waste which was brought about by the glacial period. Although a trace of this ice action is observable in Virginia, the region as a whole was substantially unaffected by the tread of the marching ice. This difference leads to a great modification in the character of the soils. In place of being the product of that distinct carriage which has brought the soils of the glaciated countries to their places, the upland portion of these States is covered by an earthy coating derived from the immediate decay of the rocks beneath the surface.

The Appalachian Mountain system, in its two elements of the Blue Ridge and the Alleghanies, widens as we go southward from the Potomac. The result is that an even greater share of these States

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

consists of mountainous elevations than we find in the New York group. The western portion of each State is occupied by heights which rise so far above the level of the sea that the climate is greatly affected by the uplift. These mountains are, however, far less sterile than those of the New York and New England districts; not having been swept over by the ice, they retain their original soils and thus afford larger areas for tillage than are found in the more northern highlands. In each of these States, by way of contrast with their upland districts, we have along the shore a broad belt of lowlands, territories which were, until very recent times, beneath the level of the sea. This great southern plain, which extends from New Jersey southward, widening as we go toward the equator, affords, compared with the mountain districts, the sharpest contrast of conditions which are found in any part of this country.

Owing to the slight elevation of the plain region, its nearness to the Gulf Stream, and the protection which the mountains afford on the northwest, the climate becomes very much warmer on this plain as we proceed southward. Between dawn and dark of a winter's day we can journey from the frigid conditions of New York to the semi-tropical climate of Charleston—from the realm of frost to one of flowers. With a shorter journey from the mountainous heights of the western Carolinas, which have a winter temperature about as low as that of New York, we may pass toward the sea through the same range in temperature conditions. This contrast in climate is equalled by that between the under-earth resources of these two sections. In the mountainous portion of these States of the Virginia group we have an abundance of mineral wealth, the search for which has but begun. Gold, iron, copper, zinc, and various other substances of economic importance abound in the upland portion of this area, while the lowland parts have as yet afforded but small supplies of such materials, phosphates being the only geologic element of any importance. It is evident, therefore, that the plainland region of this district is to develop purely agricultural industries, while the upland section, by its admirable combination of soil, noble forests and mineral resources, is to have more varied industries, and therefore a more diversified life.

Although within the above-mentioned States the resources of fossil fuel are limited, we find, immediately on the west of the district, and everywhere convenient to it, the vast coal measures of Tennessee, Kentucky, and West Virginia fields, which afford bituminous coals quite equal to those which have been the foundations of the commercial industries of Great Britain. Thus, this region of southern uplands has in its soil, its forests, and its mineral resources, a combination of advantages perhaps greater than those of any other equal area in the world. In addition to these favoring conditions the region possesses an admirable climate. In winter the temperature falls low enough to insure the preservation of bodily vigor; in summer the heat is less ardent than in the lower-lying regions of the New England and New York group of States. In the Virginia section we find a climate resembling in its range of temperatures those which characterize the most favored regions of the Old World, and it is there perhaps we may look for the preservation of our race's best characteristics.

The lowland country, on the other hand, appears to be too warm to afford the most satisfactory conditions for our people. Although the whites appear to be able to work in the fields during the summer season, the malarious influence common to a large part of the territory, as well as the lack of a really tonic winter, does not promise a brilliant future for European peoples in the seaboard portion of the district.

The population of this group of States is as diversified as their physical conditions. In the lower-lying lands the negro folk constitute a large, and appear to be, physically, the most successful portion of the population. In the plains between northern Florida and Chesapeake Bay the negro finds apparently the most satisfactory environment which this continent affords him. His contacts with the whites are sufficiently close to stimulate his languid industrial

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

motives, and the climate fits his needs in a very tolerable way. It is doubtful if the tribes of Africa, from which our blacks came, are in any better physical condition than their descendants on the Atlantic coast.

Although the negroes constitute the largest element in the population along the shore-lands of the Carolinas and Georgia, the upland section is almost devoid of Africans. This peculiar feature in the distribution of the blacks was brought about, as before remarked, by the unfitness of the upland country for the crops on which the plantations of the South depended. It has been maintained by the disinclination of the negro to dwell in cold countries and the indisposition of the white population to tolerate their presence. There is good reason to believe that the negro population will not become more extensive in the upland section of the South than it is at the present time. On the contrary, it is most likely that they will spontaneously gather to the warm lowlands, leaving the cooler grounds to the white race. If this be the case, if the Southern mountains are left to the whites, we may reasonably expect this region will become one of the most important seats of an unmixed American population. It is not in the pathway of immigration; as yet it is occupied almost altogether by the descendants of British immigrants.

South of Georgia we find ourselves at the base of the most singular peninsula of this country, if indeed it be not the most remarkable mass of land on the borders of any continent. The peninsula of Florida affords the most distinct field in a physiographic sense of any part of North America. Including the northern portion of the State it has a length of about six hundred miles, an average width of near one hundred miles, and a total area greater than that of New York, and nearly as great as that of New England. In all this great realm the maximum height above the level of the sea does not exceed about four hundred feet. The whole of the soil is composed of materials recently brought together on the sea-floor. About one-fourth of the soil area is limy, due to the coral rock which underlies it. The remainder is nearly pure sand of an infertile nature. All the soil owes its value in the main to the wonderful climate which the region enjoys.

The mineral resources of the Florida peninsula are of the most limited nature. Certain deposits of phosphatic rocks exist, apparently of sufficient richness to give them economic importance. From the point of view of geological values, it is perhaps the most absolutely sterile section of North America.

Owing to its peninsulated form it has a shore line of more than two thousand miles in length; owing also to the various system of harbors which the coral reefs have created, this region has a maritime character and fitness of contact with the sea which is not enjoyed by any other portion of the coast south of the Chesapeake Bay. The harbors, though shallow, afford tolerable protection to small vessels, and the extraordinary wealth of fish in the waters make it certain that in the future this region is to have an industry resting upon the harvest of marine life such as is afforded by no other section of the Atlantic coast. Not only do the food fishes abound, but the waters afford vast quantities of sponge, and the species of marine turtles find a better station along this shore than any other section of the continent.

The physical conditions of Florida make it plain that this peninsula is to develop its life on the lines of agriculture and of marine industries. The agriculture is destined to be of a peculiar sort, gardening, in fact, rather than the ordinary field tillage. The tropical and subtropical fruits, the orange, the lemon, the lime, and tenderer sorts of vegetables may be easily reared and assure the agricultural possibilities of this district. It can never be a corn-bearing country, and the grazing industry is practically excluded by the imperfect growth of the grasses. Owing to the fact that this land is wrapped around by the seas, the summer temperature as well as the winter is insular in its character; although at present the region is a prey to fevers, they seem due not to an essential unhealthfulness of the climate but to the bad sanitation. Even in the extreme south, on the Keys and

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the shores of the beautiful Bay of Biscayne, the population appears to be very healthy; the children are vigorous, extreme old age is frequently attained, and there appears to be an exemption from deadly malarial fever. We may best judge as to the climatal effect on man by the condition of the Indians, which is excellent. No portion of our aborigines appear to be in a better physical or moral state than the Seminoles of Florida.

It is an advantage enjoyed by this section, which it shares with the highlands of the South, that the negro population is very small. Although the climate is one which suits the negro, the present industries, and those which we may foresee for the future, make it likely that this race will be slow to take possession of the country.

On the west of Florida and Georgia lie a group of States which face the Gulf of Mexico. Between western Florida and western Louisiana, and back to near the northern border of Alabama and Mississippi, we have a region of lowlands which derive their quality from their relations to the Mexican Gulf. The lowland portion of these States is, in its geological history, like the lowland section of the Atlantic coast. It is an old seabottom which has recently been elevated above the ocean. The soil, save along the banks of the rivers, is of only moderate fertility; but it bears luxuriant forests and is excellently suited to the great staple cotton, on which the commercial development of the section has rested. Owing to the fact that these States lie at the southern end of the Mississippi Valley and are unprotected by mountains from the winter blasts, they are subject to great variations in temperature. The summer heats are great, and to the white population enervating. The winter cold, on the other hand, is considerable, sufficient indeed to bring something of the tonic effect upon which our race is so accustomed to depend.

The northern part of Alabama, as is well known, abounds in stores of coal and iron. In topography it is sharply contrasted with the southern portion of the State, and its wealth of mineral resources insures in that section a large manufacturing industry dependent on the materials from below the soil. The population of the States between western Florida and eastern Texas is, on the whole, a less satisfactory part of our American people, for the reason that the negro element is at present, and is likely, for all the foreseeable future, to have a greater place in this territory than it has in any other part of the United States. It is true that at present South Carolina abounds in blacks in an equal measure with Alabama and Mississippi; but with the growth in population of the highland district of the former state we may fairly expect that this preponderance of the African element will disappear. On the other hand, in southern Alabama, in Mississippi and Louisiana, the conditions of the soil and of the climate clearly point to a vast increase in the number of blacks, without a proportionate gain in the European population. There is more danger of Africanization in this section than in any other part of the United States.

North of the Gulf States, and thence to the great lakes, and westward to the Mississippi, we have the valley of the noblest tributary of the Mississippi, the Ohio, containing within its basin the northernmost portions of Mississippi and Alabama and a portion of western Georgia, North and South Carolina, a part of Virginia and West Virginia, the whole of Tennessee and Kentucky, and the greater part of Indiana and Illinois. Although the geographic limitations of this great basin are not sharp, they are sufficiently accented to make it one of the most characteristic divisions of the continent. This individuality is further affirmed, as we shall see, by its qualities of soil, climate, and its subterranean resources.

The basin of the Ohio, with the exception of some parts of its headwaters, the upper Kanawha and the tributaries of the Tennessee, lies well within the broad trough of the Mississippi Valley. It is thus in the path of the great air movements from the Gulf of Mexico northward, and from the Arctic Sea southward. Atmospherically considered, it is like the other parts of the Mississippi Valley, a region of combat between torrid and frigid conditions. In the winter season the dominance of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

polar winds brings a low temperature upon all parts of the area. In the summer-half of the year, the superior power of the tropical, northward-setting winds brings it into almost torrid heat. The range of climatal variation, measured by the periods of seasonal length, is perhaps greater in this valley than in any other part of the continent. The surface of this region is essentially without mountains. Though the western tributaries of the Ohio rise in the highest land on the Atlantic side of the continent, the portion of the valley which can be termed mountain-built does not include more than one-tenth of its area. The result is that nearly the whole of the surface is tillable. Probably not more than one-fiftieth of the total area is permanently unfitted for the uses of the husbandman.

The soil of the Ohio district has been but little affected by glacial action. It is true that the ice in the most developed state of the old continental glaciers overlaid the greater part of the Ohio, touching the surface of Kentucky immediately south of Cincinnati, and occupying perhaps one-half of Indiana and Illinois, as well as those parts of the headwaters of the Ohio which lie in Pennsylvania and New York; but over the most of this district the ice was thin and the amount of glacially transported material much less considerable than in the normally glaciated districts of the north and east. As a whole, the soils may be classed as those of immediate derivation, those originating with the decay of the subjacent rocks. As the geological strata of the Ohio Valley vary greatly in their mineral constitution, the soils derived from them are naturally divided into a good many classes. Thus we have in Kentucky and Tennessee a wide range of Silurian limestones, which by their decay afford soils of extraordinary fertility, those which give character to the well-known blue-grass district. It is worth while to note in passing that this singular richness of the earth is due to the fact that in these limestones there are certain thin layers composed almost altogether of the remains of minute creatures which had the peculiarity of taking lime phosphate from the sea and building it at their death in the deposits formed on the old sea-floors. When elevated into land and subjected to the process of decay, these rocks afford, under the action of the atmosphere, soils of great fertility; so we see that the fruitfulness of our fields may depend upon the nature of organic beings in the remotest past.

Throughout the Ohio Valley, except along the margins of the streams where the soil has been brought to its resting-place by flood waters, we find everywhere sharp contrasts in the fertility of the soil. Already, although the history of the country extends back for but a century, we perceive very clearly that these natural differences have been of great importance in differentiating the people. There is no greater contrast in any country between neighboring people of the same blood than that which exists between the so-called mountaineers of eastern Kentucky, who occupy the soil of sandy carboniferous beds, and those who dwell in the rich grass country of the central district of the commonwealth. The fertile soil of the limestone region has given abundant wealth to the inhabitants of that region; wealth has brought culture and all the circumstances of a high civilization. The sandy soil giving little to tillage, the people have remained poor; their contacts with the world have been slight, and they yet abide by their customs and intellectual development in the conditions of the eighteenth century.

It is worth our while to go one step further and to note the effect of these diversities induced by differences of soil. When, in 1861, it was to be determined whether Kentucky should go with the South or North, the question turned in the main on the occupations of the population. Where the soils were rich the plantation system was possible, the slave element was large, and in general the voice of the people was for union with the South. Where the soils were thin the people had no interest in slavery, for they owned no negroes. Old frictions with the slave-holding portions of the State existed, and consequently the people of this sterile land were generally devoted to the Union. A soil-map of Kentucky would in a rude way serve as

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a chart of the politics of the people in this crisis in the nation's history. If Kentucky possessed a soil altogether derived from limestone, there is no question but that it would have cast in its lot with the South.

The mineral resources of the Ohio Valley have a somewhat singular distribution. From western Alabama around to the headwaters of the Ohio in Pennsylvania, we have a continuous belt of country abounding in coal and iron. Nowhere in the world, so far as it has been explored, is there any region of equal extent where these two substances, both of the first importance to man, each requiring the other for its most important uses, are geographically so united. In the western part of the Ohio Valley, and separated from this eastern and southern section by a wide interval of fertile lands, lies the western coal field, extending from central Kentucky to central Indiana and Illinois. Taken as a whole, the area of the Ohio Valley has a more perfect association of fuel and iron resources together with those which are afforded by a fertile soil than any other part of the world.

In addition to the supply of energy contained in the coal-beds tributary to this district there are two other sources of power accessible to the inhabitants of this valley—petroleum and natural gas. The deposits of petroleum appear to be in the main limited to a field occupying a portion of western Pennsylvania, western Virginia, and eastern Ohio, and to another smaller and less important district on the waters of the Cumberland River near the point where it crosses the division between Kentucky and Tennessee. Although the quantity of petroleum accessible at any one point in this valley appears to be much less than that which can be obtained in the famous Caspian or Baiku field, the district is probably, all things considered, the most extensive source of supply of this substance which the world is likely to afford. The natural gas of the Ohio Valley appears to be far more considerable in quantity than that contained within any other equal area. Thus in this district we have three known sources of valuable subterranean energy — coal, petroleum, and natural gas—in more advantageous conditions, as regards quantity and nearness to fertile agricultural areas, than in any other region of the world.

We thus see that the Ohio group of States has, from the point of view of its resources, singular advantages over any other part of the continent for the maintenance of a vast population engaged in industries, both those of the soil and those of the shop. Within a century the area occupied by these States is likely to contain a larger population than that which now exists in all English-speaking countries. Although this population is destined to be to a great extent engaged in mining and manufacturing, there is room in this country for an agricultural people exceeding in numbers the present population of the United States ; for, as before remarked, there is hardly any untillable land in its area, and except for the limitations which the necessary preservation of the forests put upon the extension of the tilled fields, ninety-eight hundredths of its area can be won to husbandry.

There remains, in the part of the continent east of the Mississippi, another interesting district, which constitutes a singular physiographic unit. It is the basin of the Laurentian lakes, commonly known as the Great Lakes of North America. In this great district of inland waters we have an area situated so far north that the rigors of the climate limit the operations of agriculture to less than half of the year. The soils are throughout glacial in their character, of remarkable fertility, but more enduring to tillage than those which lie to the south of the glaciated country. This district includes the whole of the Canadian provinces of Ontario, the northern part of Ohio, the western portion of New York, the whole of Michigan, a small part of the northern sections of Indiana and Illinois, and a portion of Wisconsin and Minnesota. Although the northerly site of this area gives it a short season for the growth of plants, the region near the lakes has the climate somewhat modified by these great areas of water during the time when they are not locked in frost. The northern portion of this

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

area, nearly the whole of the region north of the Great Lakes, and a considerable part of the Michigan peninsula is mountain-built, having been subjected to the disturbances attendant on the formation and growth of the Laurentian system. The elevations have, however, a small relief. In the Canadian section nearly, if not quite, one-half the surface is barren or of moderate fertility; while perhaps nearly the whole of the district south of the Great Lakes is covered by tilled fields or luxuriant forests. The soils and the climate afford, on the whole, as favorable conditions for tillage as are found in the Scandinavian peninsula and the other regions about the Baltic which have been the birthplace of great peoples.

The mineral productions of this area are extremely varied. Coal of valuable quality does not exist within its limits. There is a considerable area of carboniferous rocks in Michigan, but they have as yet given little promise of important contributions of fuel. Iron, copper, silver, the phosphates of lime and salt are the geological staples of this region. All these substances, both as regards the mass of the deposits and their purity, appear to have in this region a pre-eminence among all the fields of this continent. The distribution of these resources of the under earth and the variations of climate in this continental Mediterranean district, provide an ample basis for a great differentiation in the population. Thus western New York and the northern border of the Ohio States which come to the Great Lakes are destined to be agricultural communities with a certain share of manufacturing industry. These parts of this field are not to be the seats of mining. The same is true of southern Michigan and southern Wisconsin. The region about Lake Superior, owing to the sterility of its soils and the rigor of its climate, is not likely to be the seat of a considerable agriculture or of much manufacturing. It is evidently destined to be a region engaged in mining and in timber culture.

The foregoing inadequate glance at the conditions of North America, east of the Mississippi and south of the region which is sterilized by cold, shows us that, despite the generally consolidated character of its geography, the variations of the soil, of climate, and of the under-earth resources are such as to insure the profound diversifying influences which come to man from his occupations. This measure of diversity will increase with each step in the advance of civilization.

VAGRANT LOVE:

A RONDEL.

By Louise Chandler Moulton.

O VAGRANT Love! do you come this way?
I hear you knock at the long-closed door
That turned too oft on its hinge before—
I am stronger now; I can say you Nay.

The vague, sweet smile on your lips to-day,
Its meaning and magic, I know of yore:
O vagrant Love, do you come this way?
I hear your knock at the long-closed door.

But why your summons should I obey?
I listened once till my heart grew sore—
Shall I listen again, and again deplore?
Nay! Autumn must ever be wiser than May—
And the more we welcome the more you betray—
O vagrant Love, would you come this way?

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

FRAY BENTO'S BELL.

By Charles Paul MacKie.

IN one of those narrow, sheltered valleys which are to the gaunt desolation of the Bolivian Andes what the green *wádis* are to the arid wastes of the Soudan, lies the little Franciscan *monasterio* of Our Lady of Many Sorrows. Such, at least, is the "devotion" of the tiny chapel attached to the miniature convent, and by this name the whole establishment has come to be called. Protected on three sides from the biting winds of the snowy sierras by the steep walls of the lofty *mesa* above, the valley opens only toward the east; whence come soft breezes warmed by the sun of equatorial Brazil, and heavy with the moisture of the far off Atlantic. These, with the irrigation furnished by the stout stream which brawls past the quiet retreat on its way to the distant Amazon, have made it possible for the good fathers, by dint of much patience and hard labor, to create a veritable garden in the wilderness; and, save for the bleak tableland towering overhead, and the gleam of a single ice-crowned peak away to the eastward, to forget that they are perched nearly twelve thousand feet above the ocean tides, in the very heart of the barren Cordilleras.

Though it was distant not more than three leagues from the city, which we may miscall La Vega, I had been a resident of the latter for many weeks without so much as hearing the convent mentioned. In the one dingy bookstore of which the city boasted, I had sometimes met a monk of the Order of St. Francis, evidently bent, like myself, on finding such relief as was possible, among the scanty collection of books, from the intolerable dulness of life in an inland South American town. Beyond a courteous "good morning, señor," or "good evening, señor," he never showed any disposition to talk, however, although his appearance had aroused my interest from the first. Not more than fifty years of age, tall and spare of form, he bore himself with a dignity as far removed from the slovenly carelessness of so many of his brethren as was his whole air from the vacant self-complacency, or sour discontent, so common to his caste. Though clad in the coarsest garb affected by the extremists of the Order, his bearing was essentially that of a polished man of the world; while his handsome, clean-cut face was stamped with the look of resolute self-control one sometimes sees in men who have walled up their past, and keep their eyes bent sternly on the path leading from it. Altogether a most interesting face; but one whose reserve forbade any approach to a nearer acquaintance.

One gloomy afternoon, as I was reading with some attention an old number of the *Revue des Deux Mondes*, the friar entered the shop, and, with a polite salutation, passed to his customary seat at the back of the room, and was soon deep in a large volume. Perhaps an hour had elapsed when, noticing the rapidly increasing darkness, I went to the door, and found the rain descending in sheets, and the steep street turned into a mountain torrent ankle-deep. The voluble expressions of regret from the bookseller at the inconvenience thus caused us, brought the monk to the doorway as well, and on seeing the condition of affairs out of doors, he turned to me and said: "We shall be prisoners for several hours, I fear, señor." Accepting his advance, I hastened to express my satisfaction at having agreeable companionship, at least; and we readily drifted into a conversation about books which lasted pleasantly enough until the rain ceased and the street was again passable. Before starting homeward I gave my new acquaintance a card, with an earnest invitation for him to join our bachelor household at breakfast any day he might elect; warning him that we were nearly all "heretics," though his welcome would be none the less sincere on that account. He thanked me with apparent cordiality and promised to take me at my word,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"though not very soon, perhaps." He added as we parted, "You, too, must come out to our little cabin, señor, without waiting upon ceremony. Anyone will tell you where it is. Ask for Fray Bento. You will be a very welcome visitor, and I shall be glad to show you our library."

On my mentioning this invitation to our host, Don Gaspar, a wealthy young Spanish merchant who was a devout Catholic and generous supporter of the church, he seemed not a little surprised. "You must surely go, Don Alberto," he said; "it is an honor that is done you." In answer to my inquiries as to Fray Bento, he had not much to say. A learned man and a good one, but not often seen at such reunions of La Vegan society as were frequented by other priests. Indeed, he scarcely went anywhere but to old Doña Theresa's, the widow of a rich merchant of the place who had married abroad. She was an Italian, and so was Fray Bento, and this was a bond between them. But he was a *good* padre (with much emphasis) and greatly beloved of the Indians. And it was a marked compliment to be asked to go to see him at the convent, especially as I was a heretic; so I must not fail to go.

It was nearly a fortnight before I was able to ride out to the convent. The rough track wound around the base of the bold mountain spur which formed an effectual barrier to easy intercourse between the city and the little valley of the Franciscans, and then followed up the course of the rapid stream already referred to. There was a warmth and softness in the air of this secluded nook very different from the harsh atmosphere of the more exposed town; and as the path approached the monks' retreat it passed through hedges of wild heliotrope and fuchsia and by well cultivated fields, where a number of Indians, directed by a cowled friar, were at work on the irrigating ditches. The wicket of the convent was opened by a young brother who insisted on taking care of my horse, telling me that Fray Bento would be found in the inner court-yard. Passing through the outer *patio*, whose centre was occupied with a pretty rose-bed surrounding a fountain, I entered the inner one, which was wholly given up to flower-beds and medicinal plants. Here was Fray Bento, diligently spading over the earth about a tall and robust geranium-tree which stood in the midst of a plat of heart's-ease and violets. He seemed unfeignedly glad to see me, and, after bringing his task to a convenient point, started to show me through the establishment. It was small, exquisitely clean, and painfully bare in all its appointments. Except the library and gardens, there was nothing about the place to relieve its air of gloomy isolation. In the former was, however, a passably liberal collection of books and a huge pile of old manuscripts dating from the time of the Spanish conquest; while the latter contained a profusion of flowers and shrubs which, in that ungenial soil, were themselves a monument to the patience and industry of the brothers. Fray Bento explained that each of these had an assigned task, either in the garden, or in the fields outside, or about the building; and he evidently took great delight in the perfect condition of the large bed allotted to himself. I remarked that his violets, while surpassingly large and beautiful, had no perfume, and said that this—a common defect at such altitudes—must be a great deprivation to him.

"No," he answered, with some sadness, "it is that which makes it possible for me to have them."

"But, father," I remonstrated, "surely they lose much of their loveliness in being odorless. It is as though a beautiful child were dumb."

"True, son; but being dumb, they can never offend," he said; and with some abruptness called my attention to other things.

His manner impressed me strongly; for he was the last man from whom one should have expected to hear a remark which savored so much of the professional cant of the conventional padre. But, whatever the cause, he clearly meant what he said; and that it was coupled with some sombre thought was evident from the shade of pain remaining on his face.

As we strolled through the pleasant, sunny paths, he talked freely of himself

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and his companions, to many of whom he smilingly introduced me as "A heretic come to judgment."

"You think it a prison life, no doubt, my son," he remarked, "and so it is in many ways; but it is better so. Petty as it seems in all its details, this very pettiness makes us the more accessible to the wretched, the ignorant, and the suffering among our fellow-creatures. There can be no cure for the wrong man does to man; when it is done, it is done; but for one we harm in our lives we have the opportunity of helping hundreds. That is, if we but take our eyes off ourselves, my son; off our useless regrets as well as our vain hopes."

This was disappointing. Here was a keen-witted, high-bred, liberal-minded ecclesiastic, apparently so wedded to the formal routine of his calling, that twice within the hour he had fallen into the language of Thomas à Kempis while conversing with a stranger who could not be expected to share either his convictions or his enthusiasm. And yet, I could not bring myself to believe that this was mere talking for effect. The whole thing was a puzzle, and I took the first occasion for retiring, somewhat in doubt as to the correctness of my high estimate of Fray Bento's intellectual attainments and breadth of views. He, however, was again perfectly natural and unconstrained as he walked to the wicket, and in promising to breakfast with us before long showed all of his notable ease of manner and graceful courtesy.

Within a few days he made good his promise, joining us at breakfast with a pleasant apology for his want of ceremony. On this occasion he proved himself to be, beyond question, a brilliant and highly educated man, exhibiting a familiarity with secular affairs which was all the more agreeable by reason of a total absence of that assumption of worldliness so often noticeable in his class in their hours of relaxation. He displayed a keen insight into the larger questions of European politics, lamenting that his knowledge of American public affairs was limited to the study of De Tocqueville. With the speculations and researches of modern scientific thought he was also at home, and in protesting, as he did, against their tendency toward materialism, he argued from a logical rather than a clerical standpoint. In talking of literature, too, he showed a broad range and sympathy which was most attractive; and we were not a little surprised when, upon one of our number offering to send up to the convent a collection of the latest foreign papers and reviews, he replied, with some decision, that he "never read a European journal." A few minutes later, with some suddenness, he took his leave, urging me to repeat my visit to the *monasterio* as soon as convenient.

Our acquaintance grew rapidly. I sought his society often and spent many delightful hours with him in studying the manuscripts of the convent library; while he became a regular visitor to our quarters and established himself as a warm favorite with all our party.

As a rule, the convent seemed utterly shut off from the rest of the world, and save for the occasional presence of the few Indians working in its fields, there was no sign of life stirring in the neighborhood. But two or three times I had found quite a little crowd of the men and women of the mountain tribes gathered about the wicket, with Fray Bento in their midst, receiving their trifling offerings and saying a few kindly words to each. A handful of *coca* leaves, a few ears of purple maize, or a quart or two of dried potatoes, would be laid on the stone bench, along with a wild cat's skin, or the pelts of chinchillas, or a hank of alpaca yarn, with now and then a little package of cinchona bark, or a bunch of gay feathers contributed by some more venturesome Indian who had been lately in the *Yungus*, or hot valleys, of the eastern slopes. One tall, fine-looking young fellow once brought a small quill filled with shining gold-dust as his gift; but, when asked where he had gathered it, had worldly wisdom enough to merely say with a wide sweep of his arm toward the eastern horizon, that he had "found it down there." Upon my remarking upon the practical nature of his devotees' alms, Fray Bento said, with much earnestness:

"They come, at least, from the heart, and are often all their givers possess

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in the world. They are for my bell, which I want to get to hang in the belfry there." He pointed to the low tower between the convent gate and the entrance to the chapel, which had no bell, although the stout beam for swinging one was already in place and painted.

"We have no bell," he continued, "except the little one you hear tinkling sometimes; and I thought it would be such a good thing to get a big, deep-toned one whose sound would go up on the *mesa*, where our children could hear it. Besides, my son, it seems to me that there is something in the voice of a great bell, especially at night in a lonely spot like this, which goes straight into our hearts and wakens our memories as nothing else can. And it is well for us not to let our memories sleep too long; some less than others." As he paused, there was the drawn look about his face which I had before seen and connected with some peculiarly sad recollection in his mind.

"The bell will cost a great deal of money," he added, in a moment; "more than twelve hundred *pesos* by the time it is dragged over these mountains from the coast. But we have nearly a thousand now and it will soon be enough. It has only taken us eight years to get this."

He spoke with naked simplicity in saying this, and it was clear that there was no thought of complaint, much less of insinuation, in his remark. He told me that our generous young host, Don Gaspar, from time to time sent for all the various offerings of the Indians and allowed him a liberal value for them all, with interest on the money until the sum should be complete. Then his firm would purchase the bell in Lima and have it brought up to the convent; so that Fray Bento would have no care about its transportation.

"Our poor people will be happy when they hear it away off in their villages," he said; "and I shall be better for it, I know. It will make me less cowardly, surely." And he turned into the library with me and commenced to talk about the manuscripts we were examining.

On my mentioning to my companions, one day at dinner, Fray Bento's ambition to secure a bell for his convent, and proposing that we should quietly do something, through Don Gaspar, to hasten its purchase, that impulsive young Castilian said that he and his fellow-Catholics present were willing to make good one-half of what was wanting if we "heretics" cared to give the remainder. This we gladly agreed to do; and Don Gaspar undertook to get the bell up from the coast without the knowledge of Fray Bento; so that the latter might receive it and have it mounted by Easter, which was always a great feast with his Indian "children."

He himself never again alluded to the matter, although more than once I had come upon him standing by the wicket, surrounded by his picturesque contributors. Indeed, he had not again referred even remotely to his religious sentiments, nor given any further indication of those deeper personal feelings which he had allowed to escape him on the two occasions mentioned. One odd proceeding was, however, several times repeated. Now and then, as we were sitting together in the *salon* of our house, or strolling through the porticos of our courtyard, he would suddenly offer some hasty apology and leave us with a singular precipitation. This became a matter of discussion among our party, and it was remarked that it had always occurred some time after we had finished our cigars, so it could not be because they annoyed him. In thinking the thing over I became satisfied that it was connected in some way with the habit of one of our number to adjourn after smoking to an adjoining room, and play for a half-hour or so on the piano. Still, this scarcely explained Fray Bento's brusqueness; for he had often expressed a love for music and shown an excellent knowledge of it, and I knew that both our player and his instrument were above the average in quality. As this might be the cause of our guest's hasty departures, however, I determined to mention the subject frankly to him and assure him that it would be no deprivation for us to postpone our concert. One afternoon, as he and I were pacing along his favorite walk—a path through the fields outside the convent walls—after having been confined for several hours in copying together an old chron-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

icle, I recalled this matter of the music, and mentioned it to him with the freedom of a good comrade.

He walked on a few steps without replying; then, stopping short, he grasped my shoulder almost violently, while a flush of color swept over his pale, refined features.

"My friend," he said, and I noticed that he dropped the more formal style he habitually used, "you do not believe in miraculous interventions, nor do I; at least in these days. But I have seen that, not once but twice, which has all but caused me to tear this gown from my sinful body and go out into the world a renegade and an outcast; lost to honor in this world and to hope in the next. God gave me of His strength, when mine was gone beyond recovery, to turn my back on the temptation and keep my feet in the dull routine of daily drudgery; to Him be the praise. But I cannot hope, I dare not expect, that such mercy will be shown me again if I wilfully offend; and, weak though it may seem, I find safety in avoiding the danger I have not the confidence to combat. Listen, my friend; you will not think me a lunatic, I know, and there is that in your face which revives a feeling I thought—yes, and hoped—was dead and buried.

"Years ago—they are getting to be very many now—I came to this remote corner of the world to be free forever from my youth. Among these rude and desolate surroundings, and these poor, ignorant people, I looked to be as safe from all contact with the past as though I herded with the dumb beasts that perish. Year after year I spent, if not happily, at least contentedly, among the squalid villages of these frozen mountains, or the savage camps of the wandering Indians down yonder in the wildernesses of the Marañon. Then the Superior recalled me from that work to train our younger brothers here for the same field. Still I found rest and peace in the knowledge that what I was doing would bring help and comfort, sooner or later, to those who needed. But one day a generous friend of our Order, one who had shown much true kindness to me when it was very grateful, urged me to attend the *fiesta* of his little daughter. I pleaded with him that such a thing was distasteful to me; that for serious reasons I abstained from all festivities, however innocent; but he would take no refusal, and to save him pain I went to his house that evening. It was a harmless little gathering of neighbors and friends, and I found there my good old Doña Theresa, a truly holy woman, who was the *niña's* godmother. I was talking with her on one of the balconies, looking out on the moonlit night, while the young secretary of a foreign legation here was playing over some airs he had just brought back from Paris. They were idle trifles; waltzes, *chansonnettes*, and scraps of operas, and I paid them no heed. Suddenly, the whole scene vanished as completely as though swallowed up by the earthquake. The dingy houses opposite disappeared, and in their place rose the stately front of a marble palace; the narrow street flowed silently by as a placid stream reflecting the stars above; down in the east the huge dome of icy Illimani melted away; and where it had stood the moonbeams flashed on the rippling waters of the distant lagoon, whence the cool salt air drifted up the canal to where we were.

"I tell you truly, my friend," and he clutched my arm again, "it was no dream. I was *there;* in the flesh, not in the spirit. Behind me was the great saloon, all gold and white, glittering with the light of a thousand candles. Over the polished floors were gliding scores of the noblest and most beautiful of Italy's sons and daughters, and I knew them all and could call them by name. And through all and above all, came the sound of liquid music and the heavy perfume of myriads of flowers. Son, it was real, *real.* It was no trick of the imagination. For close to me, so close that I caught the fragrance of the violets she always wore at her bosom, was that face I had forced my mind to banish until I thought it was forgotten forever; and *she* said, her warm breath sweet in my face, '*Póvero mio*, why did you this thing? I loved you always. Did not you know that?' But when I wanted to answer, to swear to her I had believed only her own written words, *zas!* it was all gone; and I was back on the little balcony in the dreary moun-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tain city on this side the world, and the good Doña Theresa was asking me if I was ill."

Fray Bento shook himself slightly as he released my arm and took a step forward; then, turning again, he said: "Don Alberto, this is between us. What I did, I did because it seemed right and holy and that God willed it to be so. I know now that I was wrong; that He only can judge between man and man, and alone can give man's life and take it. For that one deed I have spent twenty years seeking what chance could be found to help those who most needed help, to strengthen those who were weakest; and I daily pray to be spared yet twice twenty to do the same. But, oh, my friend! we have but one life; you, and I, and our friends, and our enemies; and what is left for those who have destroyed the one and wrecked the other to no purpose, in mere blindness of heart? God's will be done, my son. Had it not been for His grace I should then have cast my faith and my work to the dogs, and gone back to the old land and the old life to seek what perhaps did not exist save as a fiction of the Evil One. That is years and years ago now; yet I dare not trust myself to hear the sound of the world's music, or meet again the fragrance of that one small flower, lest the trial come again and I fail."

He seemed to be waiting for some word from me, and I assured him that I was grateful for his confidence and would respect it. Then, thinking that he was the better for telling his strange story, I asked:

"And the other vision, or whatever you think it, father; was it, too, like this one?"

"No, my friend, it was as nothing in comparison. It was but a flash of lightning in my soul. I took up idly a paper, long afterward, and saw there the name of one I believed long since at rest. Yet it may not have been the same. His brother's child might have borne the name, and I must not venture to hope that he indeed still lives. The burden is on my shoulders and I must bear it. Whether the sin is on my soul, God only knows. By and by it will all be clear, and I may not look back to see whether I be right or wrong. Come; it is late, and the wind blows cold off the *mesa*."

Passing his arm almost affectionately about my shoulders, he walked slowly back to the convent without speaking. As we stopped at the wicket while the young brother went to get my horse, Fray Bento raised his hand in priestly fashion, and very solemnly gave me his blessing. Then, as the younger friar approached, my friend bade me pleasantly good-evening, and said that ere long he would see us again at our house.

My horse travelled at his own gait back to the city that evening, while his rider pondered over Fray Bento's astonishing revelation, and connected it here and there with what had seemed enigmatical or inconsistent in his conduct. That the handsome, aristocratic, brilliant Franciscan had belonged to the Italian *noblesse;* that he had loved some beautiful woman of his own rank and lost her; and that for her sake he had taken the life of a dear friend, and sought oblivion for the deed, or lifelong penance for it, under the coarse frock and cowl of the discipline of St. Francis—all this seemed clear enough. But that a scrap of melody, dashed off carelessly on the piano by an entire stranger, and the casual sight of a name in a stray newspaper should so move him that, after the lapse of so many years, he had come to doubt absolutely both the extent of his crime and the reality of the fancied provocation to it, *and yet denied himself the possibility of finding permanent peace by seeking to learn the truth*—this passed by far my comprehension.

As the dark shadows gathered in the narrow valley and the stars began to shine, I reached two profound conclusions: first, that were I His Holiness of Rome, the name of Fray Bento should head the list of possible candidates for canonization; and, second, that in hastening the arrival of his bell, we, his friends, had played unwittingly the part of ruthless savages. For, that the deep tones of a great bell were in some way inseparably connected in the friar's mind with the great tragedy of his life; and that, in bringing such an one to the con-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

vent, he was purposely subjecting himself to a constant daily, almost hourly, revival of his horrible quandary, with all of its attendant misery, was as clear to me now as was the great snow-peak before me. Why he should have chosen me as the confidant of his ghastly secret, I did not know; only that one phrase in his revelation seemed to show that it was due to a fancied resemblance with someone for whom he had cared in *el tiempo pasado*. And, as he had blessed me there by the wicket, in the deepening twilight, it had seemed to me that in his mind I was standing for someone else.

When Easter approached we received word that the great bell had been safely hauled over the main Cordillera, and was now lying at a point on the table-land three days journey from town, awaiting our orders. For my own part, I was heartily sorry that it had not fallen over some convenient precipice and been dashed to pieces; but I could do nothing now in the matter without betraying my friend's confidence. So, when the order was given to drag it on toward the city, I agreed to be the medium for inviting Fray Bento, upon the plea of a special reunion, to breakfast with us on the day of its expected arrival, when we would discover our little plot.

There was no unusual air about our little party as we gathered, that bright spring forenoon, in the sunny dining-hall, and the meal was nearly finished when Fray Bento asked whom he was to congratulate as the hero of the day? In a few modest words Don Gaspar explained what we had done, and begged our guest's forgiveness for the liberty taken in interfering, even in kindness, in a task which we knew was so near his heart.

Fray Bento was very deeply moved; his pallid face grew deadly white and he locked tightly the fingers of both hands, as he said, "My thanks would be a poor return for your kindness, my friends. May Our Lord's blessing rest on you all for what you have done to-day."

As he sat still, apparently in deep thought, the silence became embarrassing, and one of our party, to relieve the strain, turned to him with a laughing protest:

"Father, should the bell not ring true, you must not charge it to the portion given by us heretics."

He looked up, smiling kindly, and replied, "You are all so bad there could be no distinctions, I am afraid. I doubt if even Don Gaspar has been to mass for a year."

Just then a servant approached him and said there was an Indian runner in the courtyard with a parcel for His Reverence, which was to be delivered only into his hands.

"Oh, Don Gaspar," said Fray Bento; "some other surprise still? Let the man come in, by all means."

A lean, wiry Indian, dressed in the long tunic of the river tribes, came into the room with the loping step peculiar to his calling, and, kneeling at the friar's side, handed him a package done up in oiled silk and heavily sealed. Touching the seal with his lips, without betraying a sign of surprise, Fray Bento asked permission and opened the packet. It was a letter written on two large sheets of paper, and he had soon mastered its contents. Turning to the still kneeling messenger, he dismissed him with the simple words: "Say that I am going, my child."

Then rising, and tightening, as if mechanically, the knotted cord about his waist, he went to the head of the table where Don Gaspar sat. Taking his hand in both his own, he said, quietly:

"My friend, the black small-pox is sweeping through the tribes in the lower valleys. It has carried off all our brethren in the mission save one, and he was dying when he wrote. The Superior sends me there to do what I can till others come; so I must say *Adios*."

We all crowded about him to offer our assistance; asking him to let us send to the convent for him some medicines, or a mule for travelling, or whatever he might need; but he gently declined all help.

"You are very good, my friends; but I must go as I have always gone, and must not return to the convent."

In answer to our expressions of remonstrance and appeal, he said, with a simplicity which disarmed all argument:

"It is better so, believe me, that I should not turn back. Fray Miguel will

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

overtake me with whatever is necessary."

Then, pressing earnestly the hand of each of us in succession, he bade us farewell. Reaching the door, he made the sign of the cross, and saying, "The peace of Our Lord be with this house!" he started on his journey.

Within a few weeks I was called to the United States. Before leaving La Vega I rode out to the convent to inquire if there was any news of Fray Bento; but no word had as yet been received from him.

The big bell was standing in a corner of the courtyard.

. . . . . .

Six years later, I had occasion to ascend the Amazon River and penetrate the forests lying on the eastern slopes of the Andes of Peru and Bolivia. Above the rapids which form the head of steam navigation from the Atlantic, I travelled for many days in a canoe paddled by twelve Indians of the Mojos. One afternoon, as we were nearing the base of the mountains and toiling slowly against the increasing current, we reached the mouth of a tributary flowing into the Chaparé, on which we were. On the little clay promontory lying between the streams, high enough to be beyond the rise of the floods, and so placed as to be seen by the canoes passing up and down the river, stood a low, black wooden cross. Some care was evidently taken, even in that lonely spot, to keep it free from undergrowth; for there was a little clearing about it, though the forest rose, a tangle of trees and vines, close behind.

As we passed the point, our *capitan* Ignacio, gave a wide sweep of his steering oar and threw the nose of our craft into the shallow water at the foot of the bank. Instantly the crew cast their paddles into the bottom of the boat, and, kneeling beside them, crossed themselves and muttered some prayers. Then rising and resuming their paddles, they backed the canoe off and started again up the darkening stream.

"What saint is that you prayed to there, Señor Ignacio?" I asked of the steersman.

"That is no saint, Señor *patron*," he replied; "it is the grave of the good padre. When the *viruelas* passed up the rivers last time, and all the other padres were killed, he came down here and tended the sick and dying Indians, who had been abandoned by everybody who could get away. Why, señor, in those days a man ran away from his wife and the mother from her child. But the good padre went about among them, and washed their sores, and gave them cool things to drink, and buried them like human beings when they died, instead of leaving them to rot like dogs, and he seemed to be made of iron; for he never got tired or sickened, until the plague was over and the people came back out of the woods to their villages. Then he fell ill; and though we sent runners all the way up to La Vega to bring help for him, and two other padres came down quickly, he died the day before they got here. But he was a *good* padre, señor, and he died in helping us poor people, like *El Cristo* he taught us about."

"Your padre was indeed a good man, Ignacio. What was his name?"

"He called himself Fray Bento, Señor *patron*. May Our Lady plead for him!"

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

WINE OF LUSITANIA.

To S. R. E.

By Edith M. Thomas.

Oh, who would storm with foolish half-fledg'd wings
The Heav'n of Song, and in one morning spend
His lease of flight and music, and descend
To be henceforth with dumb, unbuoyant things,—
The scourge proud rashness from Apollo brings!
Let me be mute an age, and take for friend
Strong Life—so may I offer at the end
One strain dew-freshened from Pierian springs,

That shall not other be than as the wine
Swart Lusitania for her kings doth shed:
Its clusters, hoarding up the rich sunshine,
Know not the groaning press nor peon's tread,
But, full ripe globe on globe, their sweets resign
In slow distilment, slender, but divine!

THE LAKE COUNTRY OF NEW ENGLAND.

By Newman Smyth.

IT is something for which the lovers of original nature may still be thankful that, two hundred and seventy years after our fathers began to chop wood in the forests which came down to the shores on which they landed, we can find, within a hundred miles of the seaboard, a vast stretch of almost unbroken wilderness, larger than the whole area of the two States of Massachusetts and Connecticut. The day after leaving the crowded streets of New York, one may find himself fairly shot into a wilderness, where he may roam at will through an immense solitude, with the stream and the voice of the rapids for his companion.

Since Thoreau published, in 1848, an account of his first visit to "The Lake Country of New England," as he happily called this region of dense forests and many waters; and since Mr. Lowell wrote his charming "Moosehead Journal," civilization has made some further inroads into the wilderness of northern Maine. The stage-coach, for the top-seats on which men and women used to scramble, has become a tradition of the past. The Kineo House, standing halfway up Moosehead Lake, is no longer a simple paradise for fishermen, but a commodious modern hostelry; and twenty miles down the West Branch of the Penobscot the canoeman who has run that fine stretch of river, and over Pine Stream Falls, may now find a considerable clearing, plenty of roast lamb, delicious wild strawberry preserves, with cream, and a comfortable bed in a large frame building, where Thoreau found only a rude log-house. But this wilderness of woods and watercourses is too vast easily to give up its ancient solitudes at the first approach of the railroads, or to allow itself to be tamed even by the repeated incursions of the lumbermen. Moosehead, which is the goal of the railway excursionists, is a large lake, forty miles long, extending through the woods, and horizoned with mountains—

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the lake of the forests; but Moosehead is itself the spacious gateway to a broad tableland in which three rivers have their sources, and where the streams are the only highways through the forests. One who wishes to pass through this glorious gateway into the Maine woods will traverse by steamboat the whole length of this lake, and land at one of the two carries at the upper end. He will have with him a guide who is at home in quick water, and who knows how to swing an axe as well as to cook; and from the camp-supplies with which he is provided, experience will have sifted every unnecessary pound. The guides have not a few good stories to tell of new-comers into these woods, and the supplies with which they came furnished; one party, they say, was provided with fifteen pounds of cheese and five of flour; another had taken rice enough, when boiled, to fill the canoe; and another actually brought a gas-stove, thinking it might be handy in a tent. If one without experience wishes to go into camp, he will do well to consult his guide in provisioning his party.

At the upper end of Moosehead Lake a team is in readiness to haul canoes and luggage across a carry of two miles, where the wagon, with the whole civilization of which it is a sign, is abandoned, and the sportsman, shaking the dust of all the ways of the world from his feet, puts his canoe into the West Branch of the Penobscot, and, with a dip of the paddle, floats off into the freedom of the forests. He must be a dull soul who does not feel a thrill of genuine pleasure when he is at last fairly afloat on this stream, the world left behind to run as it will without him, and a large, out-of-door life opening before him. By a sudden transformation-scene the man of the city finds himself changed into the likeness of an aboriginal. The primitive, but long-smothered, Indian instinct awakes in him. He becomes once more an eager, careless child of nature. He drops the manufactured necessities of life, and learns, to his surprise, how simple, elemental, and healthful human existence may become, at least in the summer season. This reversion toward the type of the primitive man proves usually a very short and easy process to campers in the Maine woods; and one is apt to return from it with a simpler heart for civilization, as well as with an invigorated nervous system. In this kind of free, out-of-door summering one puts himself beyond the vexatious comforts of hotels, and refuses to be detained even in that half-hearted acquaintance with nature which may be gained in a permanent camp, quite accessible, on the edge of some wilderness; life is given over wholly in trust to nature and the elements, and the tent is pitched on the bank of some stream, or by the shore of some far forest lake, wherever, in one's roaming, night may happen to find one. The spoils won by the rod or rifle —speckled trout, plump partridges, or a steak of sweet venison — are quickly broiled and eagerly devoured by blazing camp-fires; sleep is speedily won from beds of fragrant fir-boughs; some acquaintance is renewed with the early dawn, and many an evening's intimacy with the sunsets is enjoyed on those clear lakes, in the midst of dense woods, which seem to be the open eyes of the forest for the skies. In this careless, happy roaming, when one happens perchance to remember who he is and from what brick walls he has come—the narrow street of some city to which he must go back, with hardly a clear acre of sky to be seen above it—he could almost wish that he had been born centuries ago, and his soul have taken bodily form in the sinewy flesh of some Indian chieftain, having the subtle woods-lore for his education, and the Great Spirit for his faith, before America had the misfortune of being discovered by Columbus, or the Puritans had allotted the common lands, or man's life had been reduced to a daily study of economics, and scholastic theology had ever been invented.

The Indian's canoe is still the only device fit for all uses in this wilderness. The light cedar boat of the Adirondacks does not even enter into competition with it in the Maine woods. With almost equal facility the canoe may be swiftly paddled across a lake, dropped with the iron-shod "setting-pole" through the many rocks which vex a piece of quick water, run down a strong rapid, led over too dangerous pitches,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lifted up mere brook-courses, or, when all trace of water fails, carried on a man's head along some rough trail through the woods. The canoe is too unsubmissive and high-spirited to be quite safe for anyone who presumes on acquaintance with it, but it is a quickly responsive and faithful friend to him who thoroughly understands its moods and ways. To float along in a canoe is the poetry of motion; and if to glide down some quiet stretch of river between the perfect reflections in the waters of the overhanging boughs and moss-tufted trees of the high banks, affords the lyric passages of this poetry of motion, the canoe reaches its thrilling epic moments as it lives through some splendid rapids. It is exciting sport to run a good rapid with an expert canoeman. Above some foaming pitch the canoe is held for an instant until it takes the water just right, then over it leaps, skimming by the edge of the rock, and escaping the under-tow by a few quick strokes of the paddle to be shot half-way across the stream; to swing with the current and to be flung quivering down between the next rocks over which the mad river rushes, and so on, leaping successive pitches, following each whirl of the stream around the ledges, until, with hardly a cupful of water taken in, the canoe leaves the rapid to roar and rage behind it, and we leisurely dip our paddles again in some smooth, deep pool. Thoreau estimated his speed in running a rapid, at the swiftest moments, as about fifteen miles an hour. My Indian guide once took me through the "horse-race"—a rapid about two miles long in the West Branch—within fifteen minutes' time by my watch. As in making the descent we had to shoot across the stream several times, with here and there a bit of dead water between the ledges to paddle over, Thoreau's estimate of the speed of a canoe at its most exciting moments, in a strong rapid, seems hardly exaggerated. There may be a spice of danger, particularly to one's provisions, in running some of these falls; but so dexterous of hand and so quick of eye have the guides become who know these waters, that accidents rarely happen, and indeed, in twenty years' familiarity with them, I have only twice come near swamping; once in an unloaded canoe when we carelessly tried to cross a river too near the head of a wild pitch, and had to do some quick paddling to swing with a canoe half-full of water into an eddy; and at another time when we attempted to run a fall, which was unknown to the guide, in a canoe too heavily loaded, and were picked up for an instant on a rock, but fortunately were able to throw ourselves off before we were caught broadsides and swamped by the current. On the lakes a canoe without a load, if paddled by two good men who understand it, will live in an astonishingly high sea; but with a camp-load to be safely carried, one must sometimes wait by the shore of a lake for the wind to go down before it is safe to venture forth. Yet, when one has to go from point to point across a tossing lake, a good canoeman will manage to pick his way among the white-caps, running with a strong push of his paddle from one threatening wave, waiting for another to pass and break beyond him, keeping off from the combing crests, and availing himself of every opportunity of making progress afforded by those occasional lulls, or calmer spaces on the water, where the waves for the moment seem to have succeeded in knocking one another out. No accidents of any seriousness, within my knowledge, have happened to canoes when guides were taken with them.

Some minor discomforts, and at times an opportunity to test one's endurance, may lend variety to this life; but with a proper supply of rubber clothing and woollen blankets, it is possible to bid defiance to rain or cold; and a positive pleasure may be found in declaring one's independence of the elements, and in the conquest of the storms. Even though one should happen to camp late, tired, wet, and hungry, it is astonishing what a cheerful homelikeness the fire, when once the great birch logs are fairly ablaze, gives to a bright warm space in the forest's gloom, and how good the freshly baked biscuit seem, and with what comfort one may fall asleep though the rain beats on the thin tent just over his head. If a more equable couch is desired than the fir-boughs, when properly shingled, afford, one may indulge

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in the civilized device of an air-bed, made of rubber, which may be rolled up as compactly as a pair of blankets while one is travelling by day, and blown up with no little healthful exercise of the lungs at night. In the late summer or early autumn the Maine woods are quite free from that peculiar discomfort in which Paley found a proof of benevolence, when, somewhere in his "Natural Theology," he wrote, with a more philosophic coolness than June fishermen are apt to display: "The insect youth are on the wing." The black flies, after the middle of August, cease, except in some of their favorite haunts, to take that delight in existence which was Paley's proof of universal benevolence, and the cool, frosty nights make life no longer worth living for the swarms of mosquitoes, and they desist from their music. While vigorous men may find days of paddling, or climbing, which task and test their strength, others, whose muscles have been neglected and who lack red blood in their veins, need not hesitate to plunge into this wilderness for fear of hardship or exposure; camps can be made quite endurable during the rains, and with whole days spent in the sunshine, some of it is sure to find its way into the blood and to enrich the heart-pulses. Ladies venture on this out-of-door life with entire safety, and none enjoy more than they this perfect escape from conventionality, and restful return to nature and simplicity. In this life in tent and canoe, those special invitations to colds are not offered which the drafts and sudden alternations of temperature bring to summer visitors in hotel corridors, and on windy piazzas. If such precautions are taken, in the way of dress and outfit, as a little experience will suggest, and if the camp is made in good season each day, there is no reason why women in ordinary health should not go almost anywhere that men may penetrate through the heart of the Maine woods. And the most ardent lovers of this wilderness-life are some ladies who have tried it.

One decided advantage which this lake country of New England possesses over the Adirondacks is the vastness of its solitude. Its uncleared area is so extensive, its forests are still so unbroken by any highways, save the streams and the rough tote-roads of the lumber crews, that this region cannot become populous with visitors. Though many summerlings (to coin a word to describe us summer transients) now flit along these streams, yet is not this wilderness over-swarmed with visitors. Even while paddling down the main streams one will meet but few canoes, and may camp at night with no neighbors in sight or sound. Some future day the rich bottom lands along these streams may know cultivation; but now they are mostly left to the grasses, the wild flowers, and the deer. When I first discovered for myself the delightful possibility of relapsing for a season into this Indian-like existence, about twenty years ago, although it was then late in the summer, I learned that only two parties of "sports" (as we are called in the native dialect) had crossed before me the carry from Moosehead into the Penobscot waters; and not until the last day of nearly a fortnight's canoeing did pass a boatman on the river. I asked him for news of the Franco-Prussian war, which was then waging; but the native woodsman had not troubled himself with such foreign affairs. He was eager, however, to learn from me "what was going on up at the dam." So, each of us with his different question, passed midway in the river, he living in his forest world, and we going back to ours. How separate are the worlds in which men living on the same planet, passing each other on the same stream, may be dwelling—one man's world as a foreign land to another;—yet is there not some one world great enough and simple enough to contain us all?—some one kingdom of heaven human enough in its sympathy, and divine enough in its promise, to comprehend all men—the moral inhabitants of all worlds—in its pure and perfect good?

Since that first discovery which I made of this wilderness many of its more accessible haunts have become familiar camping-grounds, and some of our nearer trout-pools have given up their secrets; yet the lover of untamed and unhumanized nature, to whom every increase of forest distance between his tent and the nearest house is so much

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

added pleasure, has only to push a little farther back, to work his way over a side-carry, or to lead his canoe up some tempting brook, and he will find himself without pursuers, and may light his single camp-fire by some lake on whose waters no flies but his own are cast. And the trout of those remote pools, whose education to the artificial fly has been entirely neglected, rush at the hackle, or the ibis, and leap, and are off, with a flash of motion, and a whirl of the fisherman's reel, of which the more educated trout in less wild pools, often fished, seem rarely capable. Almost all old habitués of these Maine woods have some hidden lake, or nameless trout-pool, or mouth of mountain brook, and stretch of meadow-shore known to the deer and themselves, of which they say little, but to which often, during the busy days of the year, their thoughts return, and to which, when the vacation time comes again, their canoes quietly find the way. There are many unmapped and rarely visited lakes, known to the hunters, some into whose clear waters Mount Ktaadn casts its shadows, which at some future day—may it be still distant!—when these solitudes shall disclose the secrets of their peace to the world, are destined to become familiar resorts of the lovers of pure nature. One such lake I hold in memory—a round, clear crystal set in green; at one break in the forests which shelter it a rocky little brook, by which its existence had been revealed to me, runs out of it over the stones; a lake scarce ruffled by the winds which swept over the tops of the spruce and the birches which were etched, every mossy twig and lightest leaf of their branches, in the clear waters from which the trout leaped to my fly. So far as I could learn, those speckled trout, some of which had grown old enough to reach three good, solid pounds by my scales, had never had the pleasure before of seeing an artificial "Montreal," or rising to a small "professor," and we had the satisfaction of introducing them for the first time to the cheerful sputtering of the frying-pan. And within a short distance, so our Indian guide told us, lay several similar lakes whose waters have not yet been touched by any white man's canoe.

This lake country possesses two Titanic features, the equals of which it would be hard to find in the whole Appalachian range—Ripogenus gorge and Mount Ktaadn. Ripogenus Rapids are the dread of the lumber-driver and the fascination of the tourists. Before reaching this ravine the West Branch of the Penobscot has collected a whole assembly of waters into its now strong stream; gathering its powers up for a brief pause and rest in a deep lake which lies between the hills and under a precipice, it suddenly plunges, as though impatient of delay and conscious of its might, down through one of the wildest and most relentless gorges which a convulsion of nature has ever torn and twisted from the great rock for the leap and the foaming of a river on its way to the sea. Near the foot of this gorge one may stand on the brink of a precipice which rises straight up seventy feet from a dark pool beneath. Directly opposite, so near that we could almost leap across the chasm, a solid rock, sharp at its upper edge, and broad at its lower end—called from its resemblance to a flat iron the heater—splits the wild current below in two. The level top of this great wedge of rock is mossy, and covered with bushes bearing the largest blueberries, which, though they hung provokingly almost within our reach, no hand could pick. From this point we look up the gorge between precipitous walls, over which regiments of hardy spruce and birches climb—their dense ranks broken by jutting rocks and bare cliffs on which only a few venturesome skirmishers of vegetation have succeeded in gaining scant footing; while, beneath, the river is one hurrying succession of cascades, tossed into the sunlight, and momentary pools where the foam gathers under the deep shadows; and the whole wild ravine is filled with sound and reverberation as though nature within this deep gorge were engaged in some awful combat of its powers. Turning and looking down, one sees this narrow path, which has been rent through the rock, widening into a sunny valley, through which the river, at last escaped from its turmoil, winds between fringes of meadow; and beyond, only ten miles of clear air distant as the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

bird flies, Ktaadn lifts its scarred and ragged pyramid almost a straight mile up above the river and the forest at its foot.

Along the west side of Ripogenus gorge, a narrow and precarious driver's path leads from point to point on the edge of the precipice, where, during the spring freshets, watchmen are stationed while the West Branch drive of logs is being run through the rapids below. If at any place in the rapids a log is flung between the rocks and others following it are piled up in a great jam, the watchman waves his torch of blazing birch-bark, and the signal is thus transmitted from point to point to the head of the gorge; the men at the dam, being thus warned, stop turning more logs from the boom into the stream; and at the sharp, ragged ledge where the jam has occurred, an effort is at once made to break it. Sometimes a venturesome driver will go out on it, and seek to cut loose the log which holds the whole jam, and to leap ashore in time to escape going down himself with the crash. Several lives have been lost in these rapids by too great recklessness in thus breaking a jam. This watchman's path runs at one place several hundred feet along the crest of the precipice, then it descends suddenly to the level of the stream, where I have taken radiantly speckled trout, and seen silvery parr or young salmon leap from the foam of the rapids; then the dizzy pathway climbs half-way up the side of the gorge, and offers hazardous foothold as it skirts the base of an overhanging cliff, which looks as though the next touch of the winter's frost might tumble it down among the broken rocks at the bottom; and so the path runs on and on, now losing itself in the dense evergreen, and now coming out at high points into moments of sunshine, or inviting the thirsty climber to rest at a cool spring which trickles from some mossy fissure in the side of the great rock—a path this, which, if one has the hardihood to follow it its whole length up the gorge of Ripogenus, will lead him through wildness itself; and long afterward it will remain etched on his memory.

The carry around these Ripogenus rapids is three miles long, or two and a half to "the putting-in" place where the canoes lightly loaded may be safely run; it follows a good tote-road, through fine woods, favorable for partridges, and past a small pond which used to contain, under the birches at its farther end, a famous trout-pool. After passing Ripogenus one paddles through stretches of dead water, runs several rapids, and carries by some bad ledges and falls, with Ktaadn every now and then framing itself between the river-banks for a picture. Those who wish to venture the ascent of this mountain will pitch their tents at its foot by the mouth of a clear stream, which still bears the Indian name Aboljackarmègassic. From this point it is about eight miles to the mountain's top. A path which was scarcely blazed, and which taxed even an Indian's skill to follow it when I first climbed it, but which is now more worn and not difficult to trace, leads through the woods, up and down over the lower ridges, ascending by the side of a tumbling brook until it comes out on an open highway to the mountain's crest, which some landslide had ploughed and broken out before the memory of man. Nature, however, rested content with marking this possible approach to the summit, and has never taken the least pains to finish her road. It is as though Pamola, the dread spirit of the mountain, according to the Indian tradition, would give us to understand that the bold climber may approach in this way the cloudy summit, but at no easy cost; only the strong will shall gain the reward to be won on Ktaadn's height; let all but the most determined keep to the stream below.

The scramble up this landslide reminds me of the climb over the loose lava up the cone of Vesuvius. But it is much more difficult, as, at an angle of forty degrees, one not only has to maintain every foot he gains among loose stones, but also frequently must climb over or around great blocks of granite which have been left lying in all conceivable positions and confusion. We found the hollows between some of these wedges of rocks convenient hiding-places during a cloud-burst. The ascent and return to one's camp at the foot of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Abol may be achieved in a day; it is better, however, to carry what one needs for a night's bivouac a little way up the slide to the edge of the woods, and to gain an evening and a morning at the top. For the old Scripture concerning the creation is particularly applicable to the mountain-tops: "And there was evening, and there was morning, one day."

When I last climbed Ktaadn, the day had been threatening and showery; but the mountain-spirit rewarded us richly for our double temerity in seeking to gain Ktaadn's solitary top, and on a doubtful day. For while we rested and waited at the summit, the veil which had been drawn over the face of the earth was lifted, and the winds swept the clouds from around our feet off into the evening sunshine, shaping them after the pattern of the mount on which they had been formed; and as they built themselves up in great battlements and towers in the air, they took on such colors as of all manner of precious stones, and glowed in such resplendence of the whole heavens, as only could be seen from this sublime mountain-top in one of nature's transcendent hours. And while those clouds, which but a half-hour before had wrapped us in their icy vapors, were become the nearer glories of the skies to our vision, far below the slant sunbeams rested on the green pavement of the forest-tops, and at their touch, in the midst of that vast expanse of living green, lake after lake—Millinokett, Ripogenus, Chesuncook, and Moosehead in the distance under the western sky, and a whole host of lesser lakes—shone and gleamed like shields of burnished gold.

The summit of Ktaadn is itself even more interesting than the broad prospect to be gained from it. It may not be called one of the wonders of the world, but it certainly is the mountain wonder of New England. At the top we cross at first a broad plateau, covered with low forms of vegetation, and a dwarfed species of blueberries, which from the way they are spread over the rock the Indians call bed-quilts; then one makes a slight ascent and finds himself on a narrow ridge, rounding at intervals into cones, perhaps twenty feet in diameter, on the one side of which the mountain flings itself down at a steep angle, and on the other side of which it breaks off into an abrupt precipice straight down for nearly a half-mile's distance. This ridge at some points between the cones is but two or three feet wide, and, especially when the wind blows, one has need to creep carefully along it. From it you may toss a stone down and hear it falling and echoing for several minutes in its descent. But this is only the half of the marvel of Ktaadn's summit. This narrow ridge, running from cone to cone, describes a semicircle, and Ktaadn thus encloses within its heart of broken rock a great gulf of awful depth; and down into this gulf, as I stood gazing into its gloom, the cloudy vapors from the mountain poured, the winds wailing and sobbing through the mists, now blowing the clouds against the sharp rocks and filling the whole gulf with their moaning, now rending them, and lifting for a moment the vapors to disclose the cavernous depths below. Dante, I thought, could have found no fitter scene for his *Inferno*, and might have heard from beneath the wailing as of lost souls. Yet at the bottom of this same fearful gulf, when the morning came and filled its rocky depths with the warm sunlight, we saw beneath the precipice a peaceful lake. Which vision shall be the last of God's creative day, that evening's gloom or that morning in Ktaadn's Inferno? But we do not know what is last in God's one thought.

In the Maine woods the deer have increased greatly in number during the past few years, and if I may judge from the tracks which I have seen in various places, the moose are not decreasing. This result is largely due to the commendable efforts of the game commissioners, and to certain provisions of the law which prevent the wholesale destruction and exportation of game for the market. Over-legislation, however, often tends to defeat the ends of law, and the game laws of the State of Maine, in some particulars, are generally regarded as overdone by those who are naturally interested in the proper protection of game. The sections of the statutes which extend the close season beyond

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

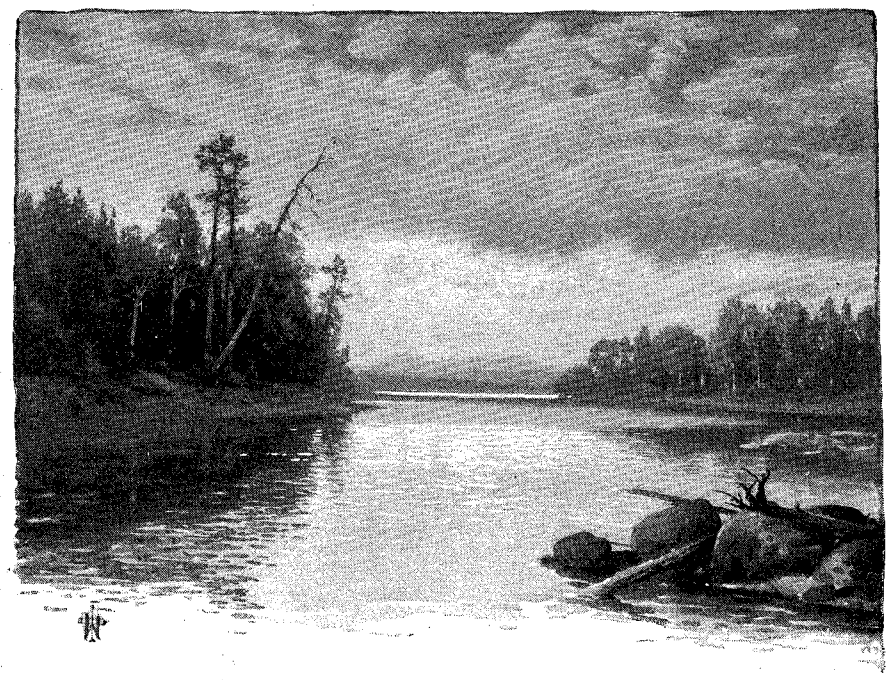
the months when men can usually take vacations in the woods, and which do not even permit a camper to shoot legally venison enough to eat when he may be miles from any meat-market, are of little practical value in protecting the game, while they succeed in arraying against the law the interests of many who should be the most concerned in seeing the game saved from extermination. Efforts have been repeatedly made by the Kineo Club to have the laws so modified that, while the wholesale slaughter of deer and moose may be prevented when they are helplessly yarded in the deep snows, some opportunity for legal shooting may be granted somewhat earlier than October; and a bill which was introduced into the last legislature of Maine for this purpose, passed one branch of that body, but was defeated in the other by some influence adverse to sportsmen. Gentlemen who take to the woods in the summer generally denounce, and are quite ready to help expose, indiscriminate and wasteful killing of fish or game; but as in the course of the season they bring considerable money into the State, they naturally think that some liberty might be granted them of feeding themselves, if they can, while in the woods, from the only meat-market which is there open to them. Some modification of the law in this respect would make little or no difference in the amount of game actually shot, and it would seem to be not an altogether unprofitable act of hospitality on the part of the State toward visitors, whom its railroads and hotels and guides invite at considerable charges to view its varied scenery, and to find rest and sport in its great wilderness.

Jack-hunting is not often practised in the Maine woods, as it has been in the Adirondacks; the hounding of deer into the water, where a blind man might easily shoot them, is forbidden by the law; and the general sentiment as well as practice of sportsmen sustain this section of the law. The usual method of securing large game in the Maine woods is still hunting. After the first snows have fallen the hunter, on noiseless snow-shoes, will follow, often for miles, through the woods and across lakes, the track of a deer or caribou; or in the fall, with the paddle of the guide not lifted from the water, the sportsman's canoe will skirt the shores, look up into the "logons," or steal along the edge of the meadows, following some brook, in the hope of seeing a deer come out to drink or to feed. It is a fascinating method of hunting, and not without its reward, although no venison may be brought back to camp. Though one may not chance upon a deer, or may start one up and see him bounding away, as only a deer can leap through the brush, there is an indescribable charm in following thus some winding stream just as the dawn begins to purple the sky, or in lingering at the edge of some grassy point, which stretches down from the dark forest, while the sunset fades and the stars come out. The recollection of such mornings will light up future hours of work, and such evenings which fall around one while still hunting, have their long after-glow in memory. This kind of still hunting illustrates the general and fine law of happiness, that what one seeks is often not the best which nature has to give. The object of the hunt furnishes the immediate incentive to activity; but the success of the hunt forms a minor part of the happiness of one's whole contact with nature in this wilderness.

Occasionally, if one has rare luck, the canoeman may come upon a moose drinking or feeding among the lily-pads; but the moose is a great, solitary creature, and generally keeps out of sight and harm in the daytime. The hunter who has got on the track of a moose, tries at night to call him down to his canoe by imitating, through a large birch-bark horn, the succession of grunts and long flourish of sound which is made by the cow-moose. He must wait for a clear, still moonlight night; too much wind may prevent his call being heard, or, if the wind be in the wrong direction, the moose may scent his danger, and cannot be allured from cover. Quietly placing his canoe close to the shore at a point where he judges from the tracks a moose may be called out, the Indian bellows through his horn, directing the sound all around the forest; and while the sportsman, rifle in hand, sits wrapped up in his blanket,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

for the October nights are cold, they listen for an answer. The call under favorable conditions may be heard for two miles; and, if a bull-moose is within call, soon, in answer to the horn, a low bark or grunt will become distinguishable from the silence in the distance. "He is coming," the Indian, who probably first detects the sound, will whisper; and as the moose rushes down in a bee-line toward the point from which the call proceeded, the breaking of the branches with his horns, and cracking of the bushes through which the great creature plunges, leave no doubt in the sportsman's mind that something is coming. Sometimes a moose may break almost out of cover, and then grow suspicious, or lose the direction, and roam wildly around, and come back again; the excitement may thus be kept up, and the hunter's suspense prolonged for a considerable time, and then the great moose stands right before the canoe, as if he would jump into it, and the decisive moment is now! "It makes me feel bad," said one of my Indian guides, after having described to me such a night, "to call a big moose right down to the canoe, and then to have my man not hit him." Four conditions must be met for success in this kind of hunting: there should be little or no wind; there must be moonlight enough to enable the hunter to see his game and to cover it with his rifle; and, what is quite as important, there should be a moose somewhere within sound of the Indian's call; and even when these conditions are fulfilled, and a moose has been heard breaking his way from the forest ridges straight toward the water, the sportsman must have succeeded in keeping steady enough to shoot at the right moment, and not into the thin air, when at last the great branching horns come out just before him, and his rifle may bring him the long-coveted trophy. These conditions, and particularly the last, give the moose a fair chance.



Foot of the Rapids at the Head of Ripogenus Lake. Ktaadn in the distance.

In the first part of this article I have sketched the way through the Maine woods which leads down the West Branch through Ripogenus, and past the foot of Ktaadn. One following that route still farther would cross the lower

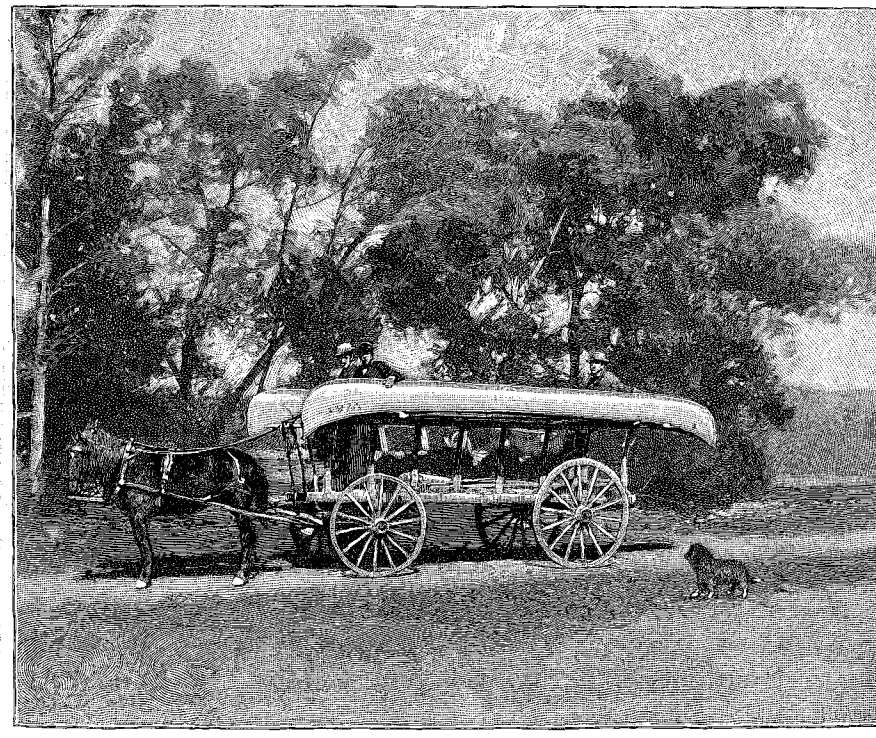
PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lakes, with grand views of the great mountain accompanying him down the river, and after several days canoeing he would come out at the railway station in Mattawamkeag.

But the trip down the West Branch is only one of many water-paths which may be followed through this forest. From the head of Chesuncook Lake one may choose either of two courses to the upper waters of the St. John; and he may branch off in various side directions; or he may find his way down either the West or the East Branch of the Penobscot.

Last summer I took for the first time this latter, roundabout, and rarely traversed East Branch trip. A brief description of what we had to pass through in that trip may convey perhaps a more definite idea of canoe life in the Maine woods. I will give, therefore, a condensed traveller's itinerary of this journey. Yet the color, and the joy, and the fun of it all, cannot be easily reproduced from a traveller's note-book.

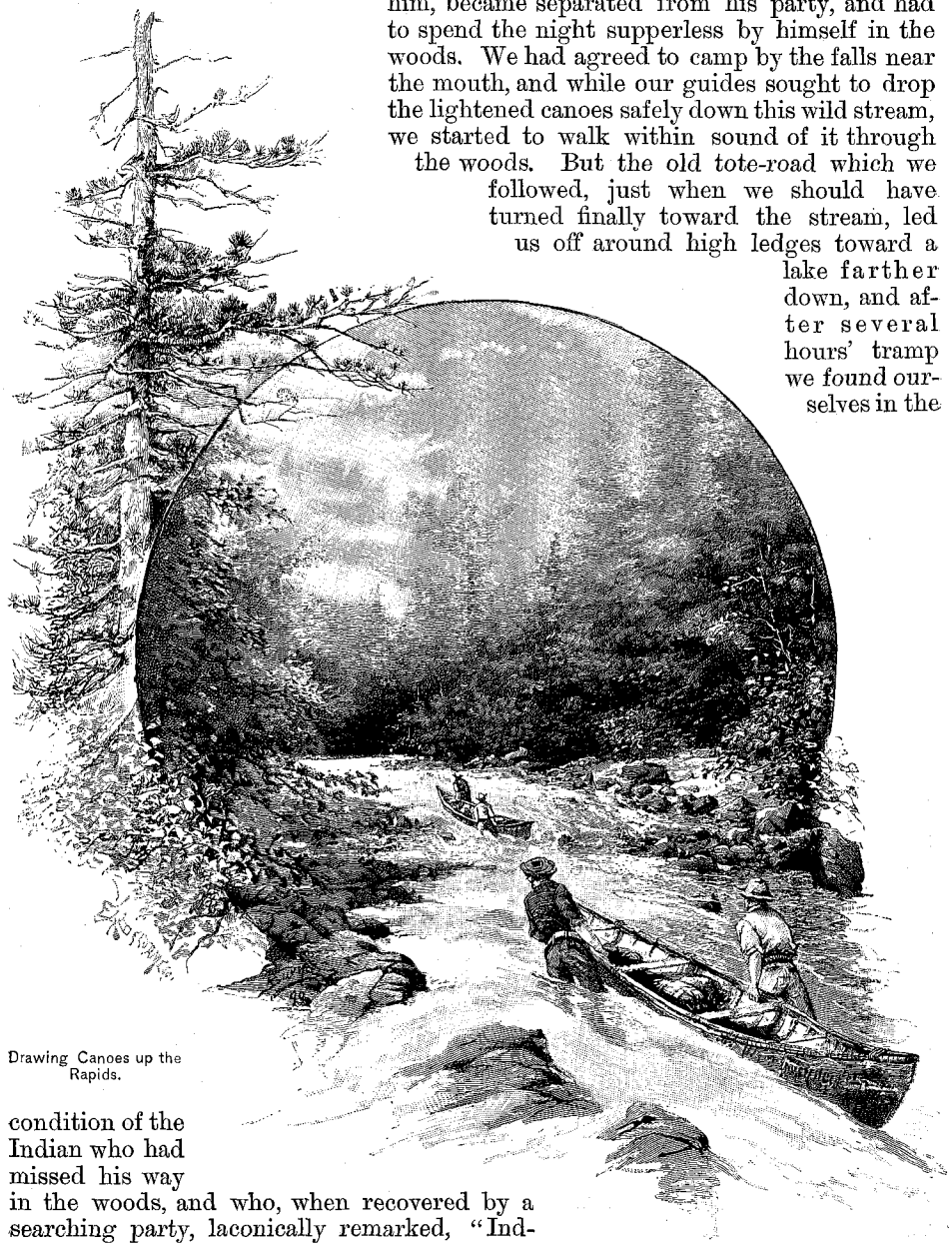
The East Branch trip requires some ten days of almost steady canoeing in order to pass in this way from civilization back to civilization. Leaving the West Branch at the head of Chesuncook, we followed Umbazooksus stream through the meadows for five or six miles of perversely crooked dead water, and then up two or three miles more of the quick, shallow stream to a lake of the same Indian name. Then we have to pass the sportsman's Slough of Despond, the Mud Pond carry. But an enterprising backwoodsman now has a logger's camp, and keeps a team and a drag at this carry; so canoes and luggage are hauled over to a pond about a mile in width, after crossing which one drops down through another winding, shallow brook until he comes out to a large expanse of water which the Indians used to call Apmoojenegamook, but which now goes by the less romantic but more pronounceable name of Chamberlain Lake. The outlet at the upper end of it lets its waters flow into the tribu-



Hauling Canoes Across the Carry—from Caribou to Portage Lake, Me.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

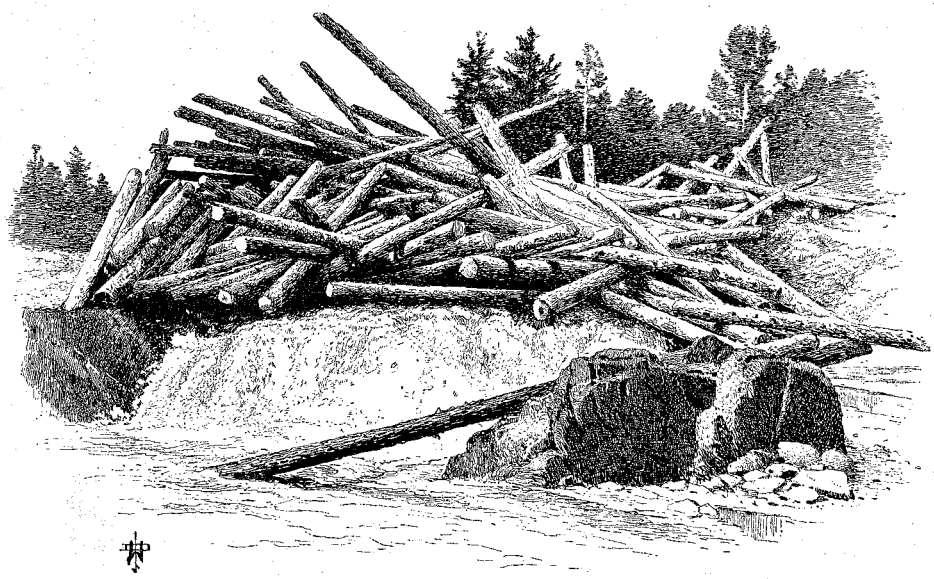
taries of the St. John; but we follow the southern shore and enter a stream which once flowed into this lake, but which now, by reason of a cut which has been made lower down, carries the overflow of Chamberlain into the East Branch waters, so that this lake actually unites the two rivers, the St. John and the Penobscot, and makes, in a sense, an island of all the broad country lying between them. Paddling across three lesser lakes, and through the narrow water-courses connecting them, we have next to run our canoes eight or more long miles down Webster Brook, a narrow but swift, strong stream, with many a steep pitch in it hazardous to the canoe, and with a fine waterfall near the mouth of it. While descending this brook course, Thoreau's companion, climbing over a ridge before him, became separated from his party, and had to spend the night supperless by himself in the woods. We had agreed to camp by the falls near the mouth, and while our guides sought to drop the lightened canoes safely down this wild stream, we started to walk within sound of it through the woods. But the old *tote-road* which we followed, just when we should have turned finally toward the stream, led us off around high ledges toward a lake farther down, and after several hours' tramp we found ourselves in the condition of the Indian who had missed his way in the woods, and who, when recovered by a searching party, laconically remarked, "Ind-



Drawing Canoes up the Rapids.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ian not lost, wigwam lost." But after returning on our track we found the river, and one of our guides found us, and we were glad enough to see again the canoes which had reached the waterfall before us. It was late in the afternoon, but after a hastily seized lunch, in which our solitary can of chicken suddenly disappeared, we found ourselves philosophically fishing at the foot of a wild waterfall in one of those pools, overshadowed by the rock, in which the trout, with their singular regard for picturesque scenery, love to dwell. Another short carry, to avoid impassable rapids, and we are dropping down the East Branch beneath the overarching trees, and then floating over the still surface of another lake with a large outlook of mountains. Here we found fit temple for our needed Sabbath's rest.

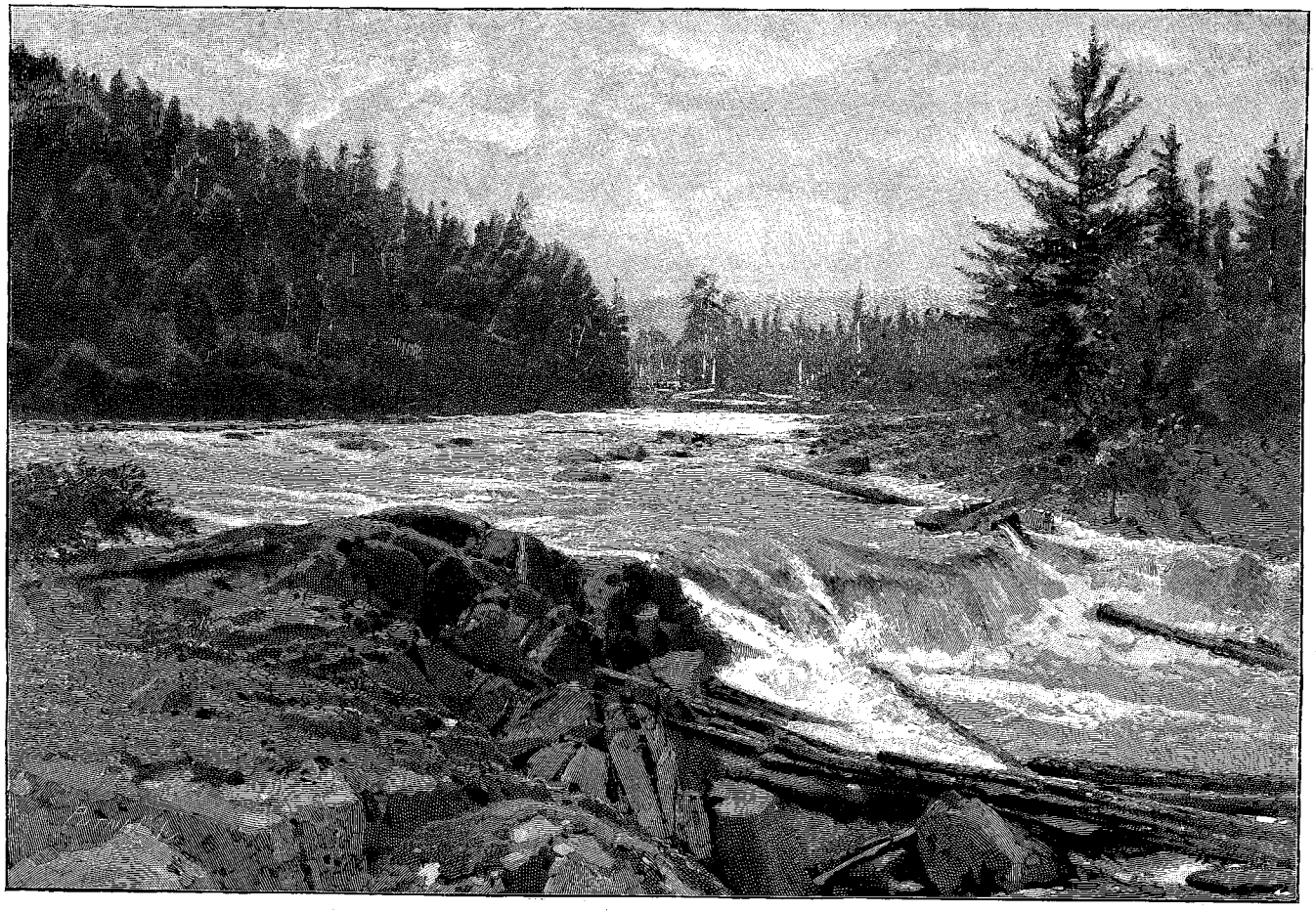


Jam of Logs at Grand Falls, East Branch of the Penobscot, Me.

The river which we followed the next morning winds through meadows, with large "logons" opening on either side, favorite haunts for deer, and then broadens into another large expanse of water, Grand Lake, from which it hurries for the rest of our journey through a succession of falls, rapids, and pitches, with occasional reaches of dead water between them.

I had been curious to observe how far up these waters I could find evidence of the ascent of the Penobscot salmon; and at Grand Falls—a pitch of the river over a ledge some twenty feet high—I had the unexpected pleasure, while I stood watching the foaming cataract, of seeing a large salmon leap clear out into the sunlight, some six feet up the falls, and, falling back, leap out a second time, when apparently the water proved too strong for him, and he fell back into the deep pool. One of the falls on this river is named "Hulling Machine Falls," for in the spring freshets the logs which are driven over it are often completely hulled or stripped of their bark by its sharp rocks. Another drop of the river, which presents a succession of white steps as one looks up it, is called Stair Falls. The scenery, as one paddles down this portion of the river, is exceedingly picturesque; the Traveller Mountains—so called because they seem to follow with the traveller down the stream—at frequent turns of the river fill out the perspective between the high-wooded banks with noble mountain forms. Some spring "logons" and mouths of mountain brooks offered as cold water as ever flows from under the great rocks;

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

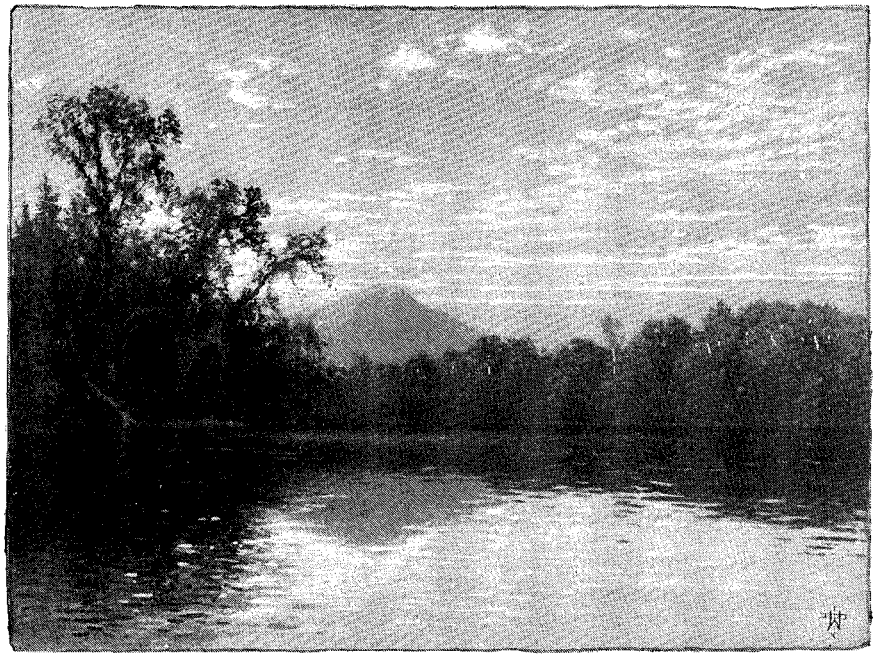


Great Falls, Fish River, Me.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

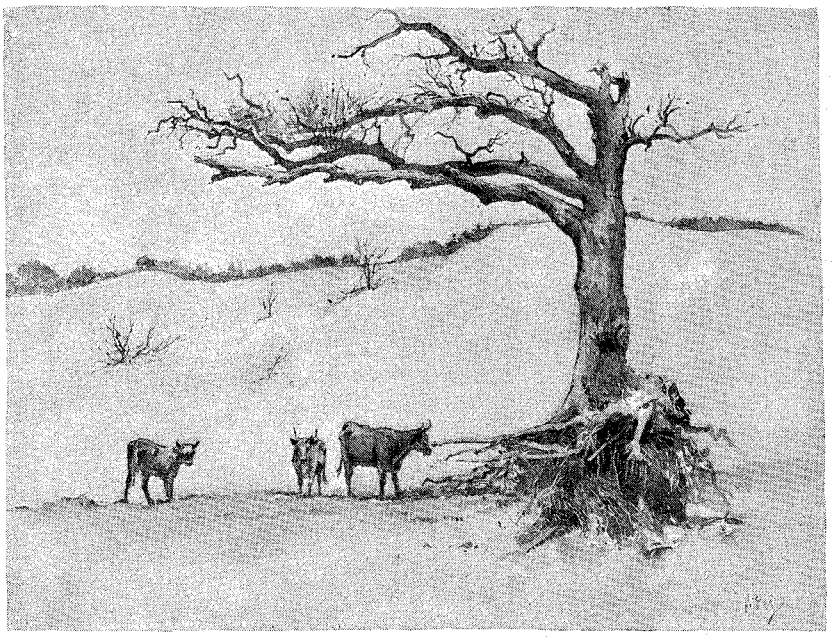
and when we cast our flies over their clear surface, so many trout would leap for them that our chief difficulty was in selecting the exact sizes which we preferred for our frying-pan. My experience, however, is that the largest trout in this whole region, those weighing from four to six pounds, are to be taken in Moosehead Lake (by those who know when and where to find them); but, though trout of four or even more pounds are sometimes killed in these streams, they do not often run higher than two pounds and a half or three pounds; just underneath Chesuncook dam, and at another pool which shall be nameless, I have taken several brook trout which weighed fully three pounds, and which looked, when first caught, like a piece of iridescence broken off from some rainbow. But a three-pound trout, true fisherman's weight, is a good trout for the Penobscot waters.

For several days we floated between the trees, had visions of mountains, and pitched our tents at evening in the forests through which the East Branch flows, meeting no one in this remoteness, and having at night the voice of the stream for our lullaby. But at last the mountains drew back into the distance, we saw tame cattle and scattered houses in the clearings, and then a whole village came in sight. After a few more miles of pleasant river we passed under that sign of civilization, a railroad bridge, at Mattawamkeag. Though in the morning we had eaten our breakfast by the camp-fire, in the evening we left our canoes and their poetry of motion, and were trying to accustom ourselves once more to the dull prose of railway travel.



Traveller Mountains, from the East Branch of the Penobscot, Me.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



On the Back of the Hatteras Sand-Wave.
(The sand-wave has passed a stunted live-oak, cutting the sand from around its roots.)

SAND-WAVES AT HENLOPEN AND HATTERAS.

By John R. Spears.

In a journey by sea along the coast of the United States no more interesting headlands are seen by the traveller than Cape Hatteras and Cape Henlopen. Both are low-lying sand-spits backed by low-lying stretches of country covered with scraggy forests; but whatever may be lacking in grandeur of scenery is more than compensated by other features that must at all times excite emotions in the spectator. To the master of the ship they are often objects of the most eager anxiety—the one that its dangers may be avoided, the other that safety may be found behind it.

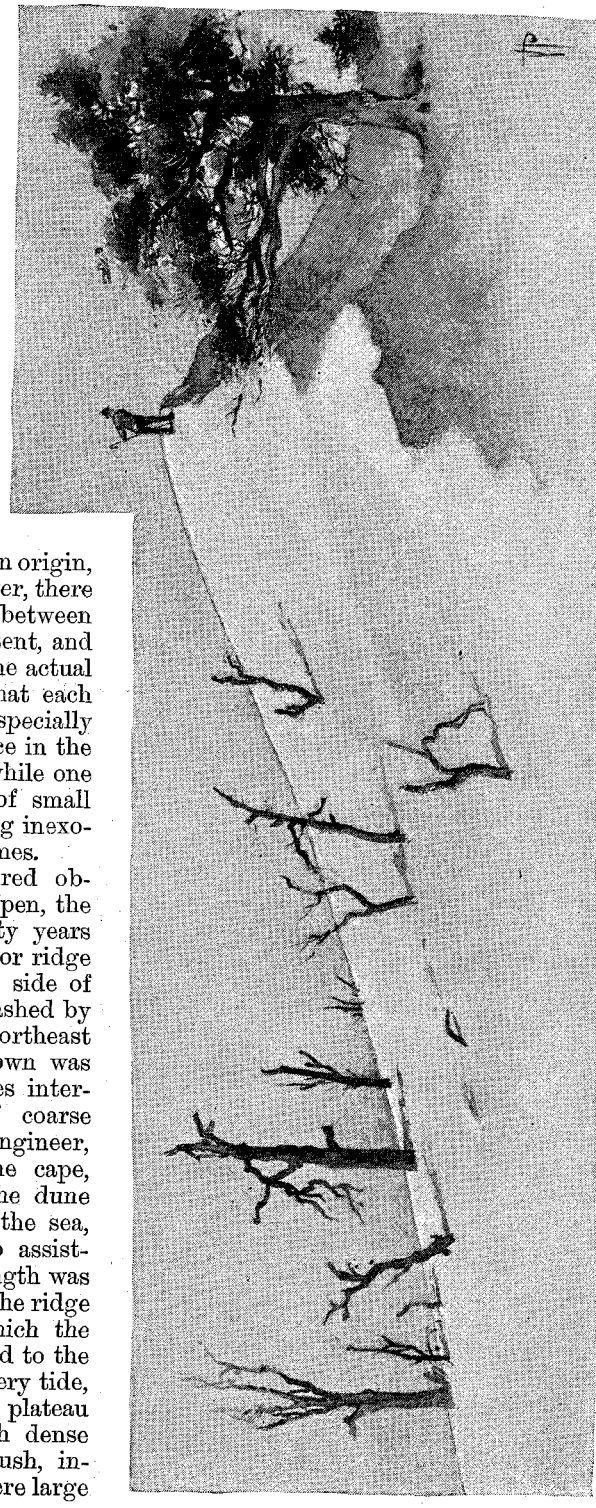
It is at Cape Hatteras that the warm, moisture-laden wind from the south meets the cold blast from the north, to form such black fogs as bewilder seamen nowhere else in American waters. It is here that, because of the contour of the coast, opposing tidal currents meet to sweep in eddies off shore, and form shoals many miles out to sea on which unnumbered ships are lost, leaving no trace behind, for no wreckage comes to this beach. It is here, more frequently than elsewhere on the coast, that the cyclones from the Sargasso Sea are felt in all their terrific power, for this point approaches closer than others to the usual path of the vortex of the hurricane—the Gulf Stream.

It is at Cape Henlopen that the most extensive artificial harbor on the seaboard, the Delaware Breakwater, is found.

Indeed no beacons in the world excite stronger or more conflicting emotions in the breast of the mariner than the black-spiralled tower and flashing white light of Hatteras, and the plain white shaft and steady glare of Henlopen, for the one stands for the Rudra and the other for the St. Nicholas of the dangerous American coast.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Born of the wind and the sea, on the sandy beach of each cape is a curious natural phenomenon. A mammoth wave of sand, that towers aloft like a sea-wave, even curling over in places like a huge breaker, is rolling inland irresistibly, and lacking only the element of speed in its career to carry such terror to the hearts of the inhabitants as is inspired by the sea-waves that follow an earthquake, for the destructiveness of the sand-wave is limited only by its scope. Though similar in origin, substance, and motive power, there is yet so much difference between the two waves in form, extent, and speed of travel, and in the actual destruction of property, that each is a study in itself. Especially noticeable is the difference in the devastation wrought, for while one is laying waste a forest of small value, the other is burying inexorably a hundred lowly homes.



Side-view of the Hatteras Sand-Wave.

According to gray-haired observers living near Henlopen, the sand-wave there was, fifty years ago, simply a great dune or ridge lying along the northerly side of the cape. Its foot was washed by the waves whenever a northeast gale was blowing; its crown was covered with twisted pines interspersed with patches of coarse grass. A Government engineer, who in 1845 surveyed the cape, placed the elevation of the dune at seventy-two feet above the sea, as is testified by one who assisted in the survey. The length was nearly two miles. Behind the ridge was a swamp through which the salt water ebbed and flowed to the depth of several feet at every tide, and which, with the low plateau beyond, was crowded with dense growth of timber and brush, including many pines that were large

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and valuable. A half-mile back from and nearly parallel with the beach ran the Government road, built in colonial times for the transportation of supplies from the old town of Lewes to the light-house on the cape.

Somehow about the time of the survey, or a little before, the old observers do not remember just when, and do not know just why, this sand-dune became animate—began to roll inland. Whenever the wind was northerly its coarse sand was picked up in clouds and sent driving along with the gale. The light-house keeper or the beach comber, bound along the crest of the ridge, could continue his way only by covering his face with a thick veil, and even then his journey was painful. The cutting power of the blast was so great that new handkerchiefs used as veils during a walk of a mile or so were worn to shreds when the end was reached. The wind was picking up the sand from the northern face of the ridge, carrying it up over and beyond the crest, and then, because the eddies in the air could not sustain the load, the sand was dropped. Inch by inch the foot of the ridge on the north side receded from the beach; inch by inch the foot on the south side advanced toward the swampy forest. The ridge had become a wave that was literally rolling in from the sea.

The twisted trees on the crest were soon uprooted and their trunks were rolled over the ridge and buried by the sandy spoondrift, or were left stranded, to be lowered eventually to the level of the beach as the wind cut the sand from under them. The trees that had stood on the back of the ridge found a flood-tide of sand about their roots which rose higher and higher till crotch and limb and twig disappeared, and the life was drowned out of them.

Then the edge of the marsh was reached and its black mould and its green vegetation were covered over by the yellowish-white flood. The ditches where the tides had gurgled in and out were filled. The tree-covered ridges that marked the swamp had the sand piled over them, and then the substantial forest on the low plateau beyond the swamp was reached, and the most interesting epoch in the history of the wave began. Where the trees stood wide apart, with little or no underbrush, the sand flowed in between and around them as so much lava might have done. Where they formed a close barrier of interlacing limbs and thick underbrush the wave rolled up before them as the Red Sea rose up against the hosts of Pharaoh, higher and higher in a perpendicular wall, until the level of the tree-tops was reached, when it curled and toppled over and buried them as a sea-wave buries a rock. With every breeze from the north the wave continued its way, and the people saw with wonder a forest covered before their eyes. The great trees that seemed capable of resisting every force that nature might bring against them struggled against fate, strove to put forth new shoots and branches above the rising tide, reaching out as if for succor, grew faint in the struggle, turned their green leaves to yellow, and the yellow to black, and so gave up and died pitifully.

As time went on the receding wave uncovered the old swamp over which it had passed. Old landmarks reappeared. The old sod and muck, and the vegetation, which had become a black mould, were easily recognized. Even the contour of the little old ridges could be made out, but the old tidal ditches were filled forever. Nevertheless the tide now ebbs and flows through the low valleys of the old swamp much as it did, with nearly the same depth of water that it had in the old days. Stranger still, a new growth of pines has started up on the ridges in the old swamp and along its northerly edge, and a new sand-dune, now perhaps twelve feet high, has formed between them and the sea.

As the big wave has continued on its way the remnants of the buried forest have been uncovered, and now the tourist who walks the crest sees on one hand the living giants of the forest gasping in the last throes of death, and on the other the bleached and decaying skeletons of other giants that succumbed long ago. In the summer, when the sun beats hot on the sand, the air dances and quivers over the wave, and the withered stumps that project above it are distorted until they seem to be moving about; while the wave itself be-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

comes animate and moves visibly forward to scorch the life out of the cool green forest in its path.

When the sand-wave had reached the old Government road it began to make trouble for Uncle Sam. The Henlopen light-house stood on a low, treeless desert beyond the forest. A fairly comfortable old dwelling stood near the light-tower, together with a little shanty used for storing oil. As the wave approached, the spray from its crest was carried over against the old home. It beat in around doors and windows; it covered carpets and rugs and bedding; it sifted into bureau-drawers and clothes-closets. No weather strips, no wifely industry, could keep it out. The wave drew nearer. It rose up like a comber about the oil-house, and one day broke over and buried it out of sight. It advanced on the old home, and it buried that too. Perhaps this house might have been saved, but it was old, and Uncle Sam built a new one, placing it well up on the face of the sand-wave. But that did not protect it wholly, for the crest advanced steadily, until it passed the light-tower and gathered around the new dwelling, burying its veranda and half the lower story, and forming about the tower a crater, thirty feet deep on one side, that is a most curious spectacle to the visitor.

Judging by the accounts of the people, the sand-wave has travelled from forty to fifty feet a year. They explain the fact that it travels only with a northern wind by saying that southern winds, being usually moist, bring rain to pack the sand; besides, that the trees on the south side have always protected it there. In this statement one finds, perhaps, an explanation of the cause of the sand-dune's original start on its travels. It is said that workmen engaged in building the Delaware Breakwater used to build fires along shore at night, and that the dune, before it became a wave, was burned over. It was thus deprived to a great extent of the protection of vegetation.

It is interesting to note that anyone examining the country back of the big wave can find, at intervals, within a space of three miles, a number of sand-ridges, by no means as large as the great wave, but yet in such form and position as to indicate that they, too, were once just such sand-waves as the one that now attracts the attention of all who visit Cape Henlopen.

But it is on the island of which Cape Hatteras is the most prominent feature that the traveller will find a sand-wave which, by its extent, by the speed with which it is moving, and by its power for distressing a simple community, will excite simultaneously his wonder and his compassion.

Fifty years ago Hatteras Island, from inlet to inlet, a distance of over forty miles, was almost completely covered with a prodigious growth of trees, among which live-oak and cedar were chief in size and number. Growing everywhere in this forest were grape-vines of such great length and extent that the boys of that day (the white-haired men of this) were in the habit of climbing into the tree-tops and crawling from tree to tree, often for a distance of over one hundred yards, on the webs the vines had woven.

The population was sparse then, but it has been increasing in such ratio as families of from nine to nineteen children may give. The people then, as now, were of simple habits, living on corn-meal, fish, oysters, pork, and tea made from the leaves of the yapon shrub; but they had to have a little money for clothing and tobacco. To obtain this they cut and sold the live-oak and the cedar.

Thus it happened that spaces along the sea-side of the island were denuded by the axe, and then burned over by the fires the fishermen built when the blue-fish and the mackerel came swarming into the beach. In time, and especially during the great demand for live-oak for Yankee clippers, just before the war, these spaces were enlarged, until at last there was a permanent widening of the whole beach north of the cape.

It was then that the northeast wind, on a bright day, picked up the sand just beyond the edge of the surf, and tossed it back inland in a fine spray, when it fell down at the feet of the laurel, and the young cedar, and the young live-oak and the pine, and the yapon. With

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

each fine day the pile of sand in the shrubbery grew, until the shrubbery withered under the breath that fanned it, and finally died. Where the green trees had stood in a sandy loam, a sand-ridge arose, which, receiving the breath of life from the northeast gale, started on a mission of death. This wave was of extended length, but its pathway was short. It reached, with the exception of a few short breaks, from the cape to Loggerhead Inlet, a distance of about thirty miles, but the journey it was to make must end at the Sound, and the island was on the average only a little over half a mile wide, though at Kinnakeet it is barely one mile from sea to sound.

The wave's progress was at first very slow, because it was of small height; it was scarce entitled to be called a wave, it was but a sand-ripple. But its speed of travel increased with each year, for every inch that was added to the narrow, sandy desert along the sea increased the area on which the wind could get a firm hold of the sand. Foot by foot, yard by yard, rod by rod the wave travelled inland.

The yapon, the laurel, the cedar, and the live-oak were buried as it rolled along, or, where the wave was not high enough to cover them, were killed by the hot sand-bath about their roots and trunks. In places were the timber was scattered, the progress of the wave was so rapid that within twenty years from its starting the narrower parts of the island had been crossed.

As was said, the whole island was covered with a great forest fifty years ago. It was in the thickest parts of these woods, but nearly always on the side near the Sound, that the people built their homes. A log cabin or a board shanty of one or two rooms, and a garden patch four rods square, were all that the Hatteras islander ever aspired to. With the aid of a "kunner" (dug-out canoe), and nets which the women knit, he was and is able to supply his simple wants from the harvest that ripens in the sound and the sea. He did not notice, or, if he saw it, paid little heed to, the stealthy approach of the sand-wave. The homes were scattered. As the wave in the narrow and open spaces rolled across the island, the isolated settler living there took up another little claim where the island was wider and the woods thicker. As the children grew up and married, they built new homes where the wave was as yet far away—where it attracted no attention whatever. There was land enough for all, and it belonged to the State, and was to be had for the asking.

At last, however, the time has come when all the available land has been taken. It is owned by someone, and there is a price, a small price it is true, upon every acre. The forests are all gone, and only groves of shrubs interspersed with live-oaks of deformed growth remain, and these are but two in number and of very small extent. Sticks of cedar have become heirlooms, and limbs of trees must be hoarded for firewood in a country where fires are seldom needed save for cooking. There is as yet no family homeless, but a number of families find the surf from the deadly sand-wave beating at their doors.

But two settlements exist north of the cape—Kinnakeet and Chicamicomico. Kinnakeet lies in a grove a mile long and half a mile wide at its widest place. Half the island has been crossed by the sand-wave at its widest place. At Chicamicomico the grove is not over a quarter of a mile wide, and consists of scattered clumps of brush separated by stretches where the wave has entirely crossed the island. Some idea of the time which will elapse before every vestige of these two groves will be gone, can be had from a single measurement which I made at Kinnakeet. The pastor of the Methodist Episcopal church (the only denomination on the island) pointed out a dead cedar which had just been reached by the advancing wave during the first week of January. In May, when I saw it, the crest of the wave was thirty-one long steps further inland. It had travelled through the thickest part of the grove one hundred feet in five months, and the Sound but half a mile away.

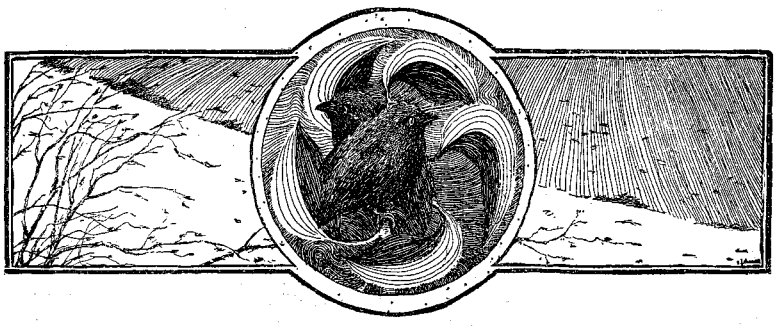
It was in the Kinnakeet cemetery that this measurement was made. In the old days a spot was selected for the burial of the dead in a little hollow that

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

was surrounded by great live-oaks and cedars, and covered with myrtles. The vine-covered branches arched and met overhead and shut out the sunshine until the soft light of evening prevailed at noon-day. Here shallow trenches were dug, and the loved ones laid to rest where the roar of the surf, modified by the intervening trees and shrubs, was as musical as the light was soft and soothing. But thoughtless greed destroyed the protecting oaks and cedars, and now the desolating sand-wave is upon the hallowed spot. Indeed, one corner has been crossed by it. The laurel and the yapon are withered and dying. The hot glare of the sun beats down where once only the cooling shade was known. The hot sand is filling in between the tiny mounds and burying them and the cedar head-boards, carved by unaccustomed hands, with names and dates and scriptural words of comfort in rude letters, many feet under the yellow sand, but not forever. Where the wave has passed, it is not content with uncovering the mounds that marked the graves, but because they, too, are of sand it scoops them up, and, digging deeper and deeper, at last exposes the coffins and even the bones of the dead. The vain efforts which the living make by driving stakes and building little huts to prevent the desecration are pitiful. The blast that uproots tree-trunks is not to be stayed by anything that this people can do.

Though but a few years must elapse before the island north of the cape will be uninhabitable, save as the families of the life-saving crews live in huts on the desert, the people as a whole are almost heedless of the inroads which the sand-wave is making. They are a contented race. One day of hard labor will yield a return that will supply a family with the necessaries of life for a week. Not that the islander very often does a hard day's work; he takes the greater part of a week to accomplish what he might do if he had to, in twelve hours. He fishes, he tongs for oysters, and he sells the surplus to dealers who come to him for it. Having food and raiment, he is therewith content. If his attention is by any chance called to the sand-wave, he languidly says that it won't reach the Sound in his time, or that when he "kain't stan' it no longer dowd doubt I will hev t' move;" and that is the end of the matter in his mind.

Yet the time will soon come when this simple people must be driven from their homes, pursued by a fate as irresistible as the deluge of old, leaving behind them all the associations of their race, of their customs, and of their occupations; leaving the bones of their dead to whiten in the burning sun, or to be lifted from their resting-place and tossed about by the merciless wind. Powerless against this tidal wave of sand they must flee away and hide themselves from its fury in a part of the island below the cape, where stunted groves may yet protect them in the years to come; or to wander Ishmael-like on the mainland. Steadily, stealthily onward creeps the relentless wave, and calmly, idly waiting, these people accept their doom.



PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

5.59.

By Charles F. Lummis.

AHA! There whistles Number One!
  And down the tingling grade she grows,
Tossing her cloud of tresses dun
  Back on the twilight's fading rose.

A mile—a moment—and my Kate,
  From years and half a world apart!
But now we'll smile at cheated Fate,
  And keep our Kingdom of the Heart.

And—But the world is drowned in steam—
  A volleying, billowing, deafening cloud—
And men there run, as in a dream,
  And through the thunderous fog they crowd.

"An open switch," I heard one say;
  An op—*But that's a wreck!* And she
A half-a-hundred yards away!
  Ah, God! How ill from Fate we flee!

How cursèd leaden drag my feet—
  And yet the rest are far behind—
On, through that misty winding-sheet,
  My—Heaven! I know not *what*—to find.

H-h! That I tripped on moved and cried!
  Ah! There she is! My Kate! my Kate!
Unscratched! And not a soul beside
  Is lost, of all that living freight.

But while the grumbling travellers hie
  To crowd the station with their fret,
Here, sweetheart, step a little by,
  To thank the saviour they forget.

Nay, not in words—that dull ear strains
  Not even to your music, Sweet!
For that poor clay in greasy jeans
  There come the stretcher and the sheet.

But of your pure heart's purest give
  To him the hungry Death that spied
Betimes himself to leap and live—
  But stayed, and stopped the train and died!

And yon dumb clinger to the dead—
  Ay, weep for her who cannot! She
Upon the morrow should have wed
  With him that brought you safe to me!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE PRIVATE SCHOOL FOR GIRLS.

By Mrs. Sylvanus Reed.

NO subject has been so prolific in themes for essayists, historians, philosophers, and critics of all civilized nations as that of Education. The founders of this commonwealth gave it their earliest attention, and American literature of the latter half of the seventeenth, and of the eighteenth and nineteenth centuries vies with that of England and continental Europe in the value and interest of its contributions to that subject. Every State in the Union has been generous to the public schools—munificent individuals have built and endowed with lavish hands universities and colleges for young men, and within the last two decades woman has had doled out to her, with great reluctance, with much reserve, and many misgivings, some of the crumbs which fall from the tables of the great universities. And four colleges, exclusively for women, have been built and generously endowed.

The question as to her capacity to receive this blessing is not yet decided, and the fear that it will subvert the purposes of nature and unfit her for the functions of domestic life is finding nervous and incoherent expression in the periodical literature and after-dinner speeches of the day. Meanwhile there is a great and powerful arm of the educational force of this country which has no literature, no written history, which is seldom referred to by periodical, scientist, or the orator of the day, except in some flippant allusion to point a moral or adorn a tale—this is the "*Private School for Girls.*"

For two hundred years this institution has held a dignified and responsible place in the educational and social system of this country. To this the American woman, such as she has been in times past, and such as we find her to-day, owes the character, the culture, the grace, and the embellishments which enable her to take her stand, not blushing for her ignorance or her stupidity, side by side, with the cultivated and representative woman of other countries.

It has no favor from the state. Being private property it cannot hold endowments; it has paid its own taxes and supported itself. European educators have marvelled that American writers should leave the world to learn by accident that American ladies were not all educated in their famous public schools. The French Commissioner of Education to the Centennial Exhibition, whom I afterwards met, could not forgive the committee which waited on him in New York that it had not afforded him an opportunity to visit the schools in which the accomplished women whom he had met in this country were trained. He requested the circulars, rules, schedules of study, and whatever records and literature of interest had grown out of my school to be transmitted officially to him. Mr. Bryce, in his "American Commonwealth," though his interesting chapter upon the "Position of Women" notices the facilities offered by the state for the education of girls and the eagerness with which they are accepted, makes no reference to Private Schools except that in a foot-note of two lines the existence of such schools in the Eastern States is mentioned.

I have been asked to give to the current history of the day a sketch of one of these schools. But to give the history of a battle before time has adjusted events and incidents to the proper perspective is conceded to be almost impossible. Even when the victory is won, and the heart swells with gratitude, the stress and weariness of the conflict, may for a time so dull the ears and dim the eye that one may be insensible to the magnitude of the end achieved and the far-reaching interest with which it may have been observed. A school which has stood twenty-six years in this community has a history full of interest, not only as a

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

witness and an expression of the character and purposes of its head, but also as a witness for or against the social sentiment and educational demands of the day, and the quality of education which parents really desire and seek for their daughters.

In 1864 when I determined to found a school in New York for the education of girls, I was impelled to do so by two motives. One, and the immediate occasion, was of a private nature, and the other and wider motive was the hope of developing plans and purposes which had long existed in my mind of founding an institution for the education of the daughters of gentlemen, in which the heart and character should have as much consideration as the intellect, and in which the standard aimed at should be the highest Christian ideal. I desired to build up a school in which American girls of the highest class should be trained to know and fulfil the duties which grow out of their various relations in life as members of the school, the home, of society, of their country, of humanity, and of the Church of Christ. The aim of this school should be to teach them that with them lies the conservation of the dignity and purity of society, and that under the favorable institutions of their country they are bound to exhibit to the world and to transmit to posterity the highest type of womanhood.

I would have each one learn that this type is attained by individual culture and individual discipline. She should learn that happiness, the ultimate end of her being, is secured by subjecting her will and her senses to reason, and her reason to the dictates of the Supreme Ruler of the universe. Her intellect must be trained to have a right judgment in all things; her heart must be kept glowing with the sweet motions of charity, and her love for the beautiful must be cultivated that it may lend its grace and charm to the homeliest lot. While the harmonies of her intellectual, spiritual, and æsthetic nature are thus adjusted, the young girl must be early taught the care and respect which are due to her own body, with a knowledge of its marvellous structure and the physical laws which govern it. This was the ideal being whom I hoped to train up to take her stand in history as the representative woman at the opening of the twentieth century.

It is in this moulding of the character that I feel that my greatest work for my pupils and for society has been done. I did not expect that every pupil or parent would recognize or appreciate this, for there are many who never lift their eyes above the level of material things. But there have been many in this community and in other parts of this country who prize it above all other advantages, and their approval and support have cheered my heart in the working out this one idea, which lifts the teacher above the prose of mechanical drudgery and stamps her common daily life with the signet of a Divine commission.

In setting out to perform a work one must not only have a clear and well-defined idea of the purpose to be accomplished, and the organized system and method by which to attain that end, but one must also consider the character and dispositions of the agents to be employed, and the quality of the material presented with which that aim is to be achieved, and upon which the methods and the skill which one can control may be brought to bear. It is also important for those who have in their hearts high hopes to achieve, and who would venture their time, energies, and fortune to secure this purpose, to count the cost and weigh the chances of success against those of failure.

In matters that depend not upon material or physical wants, but upon the wills and dispositions of the people in the community, a close analysis must be made as to the quality of that people and the motives which sway their wills and dispositions.

The selection of teachers, and the bringing of various talents, qualifications, and dispositions into one organization, guided by one motive power, and quickened by one energy, has caused me more solicitude, more earnest prayer for right judgment than any other duty. The head of the school stands sponsor for posterity; and the consequence of a false step here cannot be calculated. Unsound principles, care-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

less habits, incorrect language, or personal peculiarities in a teacher will be transmitted to remote generations.

Higher class work can always be assigned to University men, but the numberless applicants who present themselves for the routine work of a girl's school may be divided into two classes. To one belong those who, having from youth looked forward to that occupation, have fitted themselves in public or in normal schools, or in colleges admitting women, and who, though professionally equipped with good knowledge of the subject which they intend to teach, have revolved in a limited, and perhaps not exalted sphere, and often lack that inherent refinement and breadth of culture which aid so largely in the education of the young. In the other class are included those who come into the profession by other routes, those who, when compelled to depend on their own exertions for a support, bring into requisition for that purpose their educational attainments and personal accomplishments.

As special qualifications are more easily acquired than high breeding and refinement of character, I have often found this class of teachers more available for my purpose. They often bring to their work a singleness of heart, and a devotion and fidelity which come only from a high sense of vocation. In estimating the value of a teacher, mere information is too often mistaken for ability or mental power. The memory may be filled with facts, like an encyclopædia; choice bits of knowledge may be laid up, labelled as in a cabinet; but to educate requires something more than the mere possession of knowledge. The number of qualified teachers bears no proportion to the demand, especially for the training of young children. The few who are qualified scorn to take that most important work of all, the primary department of the school.

I have always felt the most intense interest in the trials and joys of children. Childhood should be gay and happy, free to turn its tendrils whithersoever it will, and to catch every gleam of sunshine from every source of love.

Years ago my imagination was so depressed by a painting of the massacre of the Holy Innocents, and by Mrs. Browning's "Cry of the Children," that ever after they were to me like memories of some terrible experience. The thought of the army of children pattering along the streets and highways at five o'clock in the morning to the mines and factories of England, and back again at nine o'clock at night to their wretched hovels, sick and faint, to die—without sunshine and without cheer—harassed my heart during those long years while Lord Shaftesbury was laboring with Parliament to mitigate their sufferings. But more cruel than King Herod, more obdurate than the heart of the British legislator, is the system which condemns little children of a tender age to spend long, weary hours of every day in constrained positions in crowded rooms and stifled air, loading their little minds with burdens which they cannot bear. In the words of the Rev. Henry Latham, "the receptive and carrying power of the mind of a child has a limit, and must carefully be measured." Dr. Carpenter, in his "Principles of Mental Physiology," explains the necessity of time for the forming of permanent impressions on the brain, and the slow processes of intellectual development; he says this "assimilation cannot be hurried; the mind will only absorb at a certain rate." This verdict, though by one of the most careful observers, and the wisest of modern men, is the one which the intelligent educator has the most difficulty in carrying out. Many parents, especially with their first children, wish to see results immediately, and judge of the progress of the pupil by the amount of memorized knowledge, which, as by a draft at sight, can be produced on demand. It is also astonishing to find how many, who are called good teachers, insist on this process of cramming the memory with knowledge, which Mr. Latham says "has no educational value to expand the mind or arouse the intellectual activity of the child, that strengthens no faculty but memory, and, in the end, by weakening others, may destroy even that."

I have been called to the school-room to witness feats of memory prepared as an agreeable surprise for me. I would find the children standing in a line, with

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

hands behind them and their little tongues would rattle off the names of the rivers of Asia and all the capes of South America. In higher classes I would be edified by a long column of dates and difficult rules of grammar. I always praised the children for their work; and in *their presence,* to preserve the proper *morale* I praised the teacher also. But if failing in subsequent efforts to convince her of the mischief of this method, upon psychological principles, I was constrained to change her for one more to my mind, it was with the sure knowledge that the credulous ear of parents would listen to, and sympathize with, her sufferings in the cause of education, and that the struggle to define the mysteries of qualitative and quantitative and participial adjectives by children who could not even pronounce the words, would still go on where no protecting hand would be stretched out over their heads.

In taking charge of little children the head of the school stands in the place of the parents. With children of tender age this parental care must ever be quick and vigilant. The judgment of children is imperfect and their feelings sensitive; and with them the instructor holds the key of happiness or of misery. Teachers of little children are often more anxious to impose their own routine and methods than to develop the power and the faculties of the pupil. It is in this department that I have suffered my greatest trials, and it is here that I feel almost constrained to acknowledge that I have suffered defeat—not as the world calls defeat; but in not having been permitted to do with these little ones that which in honor and conscience I felt bound to do.

The true teacher must be a true artist and have an insight into the nature of the child; she must bring imagination and all the highest faculties to bear upon her work. But the appreciation of true artistic work in any direction has been very slow to develop in the natures of the citizens of this great commercial metropolis. It is only the elect to-day who know, or care to know, a chromo from a Rembrandt.

The next consideration with which the school must concern itself is the quality of the material with which it has to deal. With purpose and principles avowed, with teachers engaged, the head of a school awaits the advent of that class of pupils for which these plans have been formulated. The private school is confronted at the outset with the fact that it is the pupil who supports the school. In public and endowed schools the pupil knows that the state or college gives her education, and conforms her conduct to the situation. In a private school parents and pupils very properly regard the arrangement in the light of a contract. In many cases the pupil is allowed to choose for herself the school to which she will go; and this fact is announced at her entrance. It may readily be seen how complicated relations between principal and parents and pupils might become, were there not a simple and strict system of ethics brought to bear on the first inauguration of the school. I have informed my pupils at the beginning of each year that while yesterday we were strangers to each other, having no relations to sustain, to-day their parents, by placing them in my care—not to promote my prosperity, but for their own greatest good—had entered into a covenant with me, which covenant I, by God's help, was determined to fulfil. I should also do all in my power to help them fulfil their part. But if they failed in will and disposition to do so, I should regard the covenant as broken, and they must retire at once from the school, for I would never retain a member who was a let or hindrance to others, or a trial and vexation to myself.

The young are generous and valiant, quick to see and respond to relations. A leader who will inspire them with enthusiasm and establish an *esprit de corps* must have firmness and courage, and move unswervingly upon the lines of inflexible principles. But, this once done in a school, good government is forever insured. During twenty-six years, never, in a single instance, by word or act, has disrespect been shown to me by a member of my school. I have treated them all with the same courtesy as if they were my guests. I have been scrupulous to receive them every morning in suitable attire. I have always received and taken leave of them standing, often when

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I was very weary. I have never passed them in halls or corridors without giving and receiving a salutation, and if, after spending much time and money in having them taught and trained in the most exacting system of manners and etiquette, on the evening of the week which I set aside to entertain them I required from them a careful toilet and a court courtesy, it was because I wished them to be equipped for extraordinary occasions, as well as for the usual amenities of life. The rehearsal over, their dance and song were unrestrained, and enjoyed by me as much as by themselves. This social drill, which some affect to treat lightly, takes but little time, is good exercise, and gives to the body flexibility and poise. But it gives also to the girls the confidence which enables them on occasions to forget to think of themselves.

This material from which the ideal is to be constructed is a being with a physical, mental, and moral nature to be developed and educated. This education is not like a mechanism produced by cunningly fitting together portions of grammar, science, and art; neither is it a receptacle to be filled. The child brought for education must be regarded as a distinct personality, different from all other personalities, the result of antecedents and environments upon which, just as it is found at that moment, must be brought to bear the strongest motives and influences, to induce it to make sacrifices or suspend self-indulgence, for the sake of an end at which it aims. So far all true education must be the same. The state will take the child on its way so far as to enable it to become a good citizen; there its duty ends. The college goes further and aims to make a learned man. The state and the college treat all their children alike; the curriculum is inflexible, and the stagnation of uniformity is often the result of their rigid procrustean rule. While system, methods, and careful organization must form the groundwork of any school, the true aim of education should be to seek the *individual*, that it may bestow upon him in himself the fulness of its blessing. And in this garden there should be no attempt to make a lily of an orchid, or to train a violet into the gay flower of the parterre; nor, though parents often expect it, and resent the failure to produce it, can the "hyssop on the wall" be developed into a "cedar of Lebanon."

Strange ideas as to the function of an educator are sometimes met with.

A socially ambitious mother, in a city renowned for the beauty and grace of its women, was greatly disappointed that her daughter, one year a pupil of the school, and an amiable and clever girl, did not take rank in society as a reigning belle. Nothing could exceed her bitter reproaches against the school on that account.

Instead of fostering false, unwholesome ideals, and worldly-mindedness, a good school corrects all of this, and gives to the pupil principles of action, high ideals, and practical habits which steady her through the vortex and over the dangerous strands of modern life.

A bright and rather handsome girl from a Western town spent the last year of her school life with me. She was respectful to her teachers, courteous to her companions, and though perhaps rather intense, most kind to everyone. Nothing in her disposition or bearing indicated the attention with which the eyes of the world would hereafter regard her. On taking her from school her mother informed me that her eldest daughter had married a humdrum man and settled down to mediocrity, but that she was determined that this daughter should have a career. She should take her to Newport for the summer, bring her to New York for the season the next winter, and with the experience thus gained take her to London the following summer for the success which she had planned. The Atlantic cables and foreign and home papers of every degree have borne testimony that she achieved her career.

The yellow-covered novel idea of a girl's boarding-school is also familiar and amusing.

In *The Popular Science Monthly* some time ago was an article devoted to "Hygiene in the Education of Women," in which was the stereotyped tirade upon the useless and insipid lives most young ladies lead. It says: "The system of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fashionable boarding-schools, whose anxiety to render their pupils accomplished and fascinating at all costs results in a forced and at the same time imperfect training which, combined with luxurious living, absence of exercise, and other healthy circumstances, tends to increase the irritability of the nervous system and to foster a precocious evolution of character. As this is increased, tone and energy are diminished. The girl returns from school a wayward, capricious, and hysterical young lady, weak and unstable in mind, habits, and pursuits."

There may be schools like this, there must have been somewhere at some time an original and a negative for all these worn-out impressions which are thrust upon the public view; but I have never seen one, and I think it time to adjust the camera to a new subject. The boarding-school with which I am familiar has in it none of these hysterical, capricious young ladies. If such an one enter she is speedily cured. Rising at half-past six, breakfast at half-past seven, a brisk walk at half-past eight, morning prayers at nine, followed by class and study until noon; then a hearty luncheon; class and study again until 2 P.M. leave little time for anything maudlin, or for the greatest bane of a young girl's life, introspection. Each hour she passes into a new atmosphere, where new enthusiasm makes the time fly as on wings. At two o'clock all emerge into the open air —the day-scholars to go home, the boarding-scholars to the park for an hour; on their return, a slight repast awaits them; then music with masters, or study in a room with a governess; the hour from five to six with French or German conversation, brings the time to dress for dinner. Dinner, at which the canons of good breeding are strictly observed, lasts an hour, after which is recreation or repose. From eight to nine study, and at half-past nine a governess puts out the lights and the house is quiet. There is nothing in that routine to increase the irritability of the nervous system and to send the girl home "a wayward, capricious, and hysterical young lady." On the contrary, the brains are hardened, good salutary habits are formed, promptness and careful value of time become the rule; good manners, from being enforced by example and precept, become second nature, and the doctor is seldom in demand. Notwithstanding all the pressure which comes at the end of the school year, the girls might be exhibited at that time as specimens of perfect normal health.

The visits to Huyler have been almost the only disturbing element in the sanitary record. By an accurate estimate, with proof (including doctor's fees, lessons lost, medicine, etc.), I have demonstrated to the girls that a pound of candy may, and often does, cost them twenty dollars. This demonstration with a limitation of such visits to Saturdays of late, has mitigated somewhat my sufferings, as well as theirs. As some of them assure the doctor that Huyler is an important factor in determining their selection of a New York school, this is surely a triumph.

Besides educational and financial considerations a private school is expected justly to exercise a peculiar care in the selection of pupils in respect to their social desirability as associates. Here a narrow and false policy must be guarded against. Social questions must be considered with great care and discretion, which only the initiated can be supposed to appreciate or to have discovered. A woman's education must qualify the individual to hold her place and fulfil her relations in the society or community in which her lot is cast. In this country the class called the best society is constantly recruited from the rank and file; there is therefore the absolute necessity of infusing the healing and vivifying influences of true education, the pure ozone, into the very depths. The æsthetic arts, the love of nature, the love of beauty, should go hand in hand with the rudiments of learning into our common schools, into our public institutions, even into the schools of the almshouse and the reformatory. No place so humble as to be beneath it, no place too lowly, if it contains a being who may bear the title and have the right to exercise the functions of an American citizen.

But if these classes should feel these

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

influences, what shall we say of those who stand in the front ranks of society, who stand so high that, like the sun, their influence is felt in every orbit of the social system? All this the patriotic educator must have in view when the first impression is made upon the sensitive nature of the young child. This little being is to become an essential factor in the world's history. And, in view of such an awful responsibility as the moulding of an immortal spirit, the educator should hold on her way, never temporizing with adverse influences, whether from gigantic wealth or uncompromising ignorance.

The history of social life in a nation is happily not always the history of the special circle which comes to the front in a metropolis, and yet the influence of that portion or class of society which sets the fashion is of great importance. It is the outcome of influences and institutions most interesting to the philosophical inquirer, and it is a question worth considering, how far a people is justified in allowing that set or coterie to have sway. In the matter of extravagance, with the old republics of Italy and many other governments, sumptuary laws were thought necessary. In England to-day the Duke of Westminster is compelled by act of parliament to expend a certain proportion of his vast income in repairs and renewals of his London estate.

No one can more seriously respect a proper regard for the early associations of children than the writer. Evil communications corrupt good manners, and the true and conscientious teacher should keep the atmosphere which the innocent child is to breathe morally and spiritually, as well as physically, pure. More than this: A private school, which is supported by the parents, owes a duty to those parents that vulgarity and coarseness should not enter in. But parents must not ask too much of the school. The true work of education must begin with the very young child, even at the cradle. In any theory of education worth considering, it is the first and earliest years which are to be directed with discretion and truth. This done, the higher education, of which so much has been said and written, becomes an easy matter. It is owing to the mistakes and caprices of parents, at this early period, that good schools have difficulty in keeping up a high standard.

Too often the first thought of a mother over the cradle of a little child, especially if it be a girl, is how to steer and trim her little bark so that at the proper age she may float upon the serene seas of social success. The schemes, and devices, and worries of young mothers in New York to achieve this end; the complications in which they involve themselves, and the energy which they expend to control or to interfere with the affairs of a school in matters of which they have no knowledge or skill, would be amusing were it not so pitiful. While they talk of anxiety and interest for the education of their children, it is this meretricious end alone which many parents are seeking. The teacher receives their children with the knowledge that her best work will never be appreciated.

And the saddest thing of all is that the children see through these wretched subterfuges of the tuft-hunting parents. Such a child, taught at school that "she must not be puffed up, and not behave herself unseemly, and not seek her own," and that she must speak the truth from her heart, often becomes at home, in her guileless innocence, a witness against the double dealing of her parents. She is furnished by them with a list of little girls with whom she may not play. But, in happy forgetfulness, she transgresses; she cannot understand why she should be put to bed without a supper for playing with a good little girl, and why her parents should wish her to play with a naughty little girl who disobeys and grieves her kind teacher. The child is perplexed between the ethics of the home and of the school. The parents are in a dilemma, for "they have promised and vowed that their child should love, honor, and obey its teachers, spiritual pastors, and masters." They end the difficulty by cutting her off from the good school, and sending her to one more subservient; or, oftener, by joining her to a private class in charge of one whose poverty of mind or estate suggests no perplexing questions. After many shifting experiments, this child is sometimes brought back to the school

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a mental wreck, too far gone for repair; or she is launched into society with no discipline, no acquirements, no armor in which to trust against the life which she is to confront.

This is not the least of the trials which a conscientious teacher must face. The great success of a school is often won by features which the head of the school regards as accessories rather than essentials, and the best and most serious work is done almost by guile, and with no hope of winning for it worldly recompense or repute. If the school has upon the roll names recognized as of social consequence, the teacher is often humiliated by the conviction that it is not the educational, but the external social advantage, which brings the new pupil. But in a large community with multifarious interests, like that of New York, there is always an important and intelligent class of citizens who are above all such baser motives. They really desire and seek for their children the best education which can be obtained. They have some faith in schools which have borne the test of time and the perils of success. Their social standing, and that of their children, is secure. In their recognition and support the honest and uncompromising school will always win in the end.

Often, when I have led girls to the crowning moments of their school life, have seen them resist pleasure, self-indulgence, and temptation because of real enthusiasm for their work, as well as to please their parents and do credit to the school; when I have watched the growth of spiritual life and high purposes, and felt sure that I returned them to their parents as pure in heart as when in the timidity of childish innocence they first placed their hands in mine, and believed that their parents would guard these treasures with jealous care; I have seen that which has filled my heart with grief. These parents, entitled by high birth and gentle breeding to every social advantage, have themselves stood aloof from the new society, and shrink from its demands upon their comfort, its late hours, its midnight suppers, and its morning dances; and, have confided their innocent and beautiful daughters to the care of some old campaigner on whose face are scored many sharp and ignominious social conflicts, who will gladly induct them into the devious mazes of her social code in exchange for the notice and the court which their youth and beauty bring to her at the opera or the ball.

One tempestuous winter's day, when naught but dire necessity would be supposed to lead one out into the storm, the mother of one of these girls entered my library, where I was seated by my fireside.

"I have come to open my heart," she said, "to ask your counsel, and beg your sympathy."

Her daughter had been two winters in society under one of these chaperones, and had just opened her mother's eyes to the quality of education which this experience had taught her. The mother then repeated to me phrases from the vocabulary of the club men and older women, innuendoes and sayings, the double meaning of which her daughter had interpreted to her. That which had distressed her most of all was that, while last winter her daughter could not hear this talk without dropping her eyelids and blushing most provokingly, now she could hear it all without a quiver of the lip. I could give her no comfort, but reminded her that she should not have confided to another the choicest and most delicate trust which life can bring to a woman. And so these parents send their sons and daughters through the fire to Moloch, and then ask why they are scarred and seared by the contact. The history of American society for the last fifty years has not fulfilled its promise.

In 1839, the date of the diploma given to me when I completed my own school education at the Albany Female Academy (which Dr. Andrew S. Draper recently said is the first higher educational institution for women the world ever knew), one should, upon the principles of the theory of evolution, have been able to prognosticate the character of the social condition of this country for the next quarter of a century. Virtuous, dignified, and religious, the American woman was the central figure

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of every household, presiding over her realm in great security, not vexing her mind with questions of rights and privileges which had never been disputed: and if she lived in bondage it was of her own choosing, after her own heart. The men of our cities had not organized themselves into clubs, but spent their evenings with their families, or in social enjoyments where the young and old met together at an early hour and dispersed at midnight, the time at which society of to-day sets out upon its career.

Were one to draw a social picture of that day, there would be seen, of a winter evening, the cheerful drawing-rooms, the bright open fires; father and mother in one room reading, or perhaps playing whist with some neighbors; the daughters in an adjoining room, guests dropping in to chat over the gossip or news of the day, to sing a new song, perhaps accompanied with the violin or cello, to discuss the last chapters of Dickens or Thackeray, just received by the last packet, an essay by Macaulay or Carlyle, or a poem by Tennyson. If there were no questions of intense interest at home, the Oxford movement in England, the Syllabus at Rome were subjects of lively discussion, and now and then some lately returned student from the German universities treated us to a discourse upon the new philosophies. In those days there were very few of the suffering poor, even in our large cities, and it was the boast of our institutions that it was in the power of every citizen to gain a respectable livelihood.

Those were rare days, and young men and women were receiving that fulness and richness of the higher education which can only be found in the agreeable intercourse of cultivated society. There was a zest to social life; at an evening gathering the guests were capable of entertaining themselves, and were not constrained to listen to recitals from romantic young people, paid to entertain them. Young men of talent received the polish and fine finish, the "delicatesse," so charming in the older men to-day, but which is lost to the generation which has spent its evenings, its Sundays, and leisure hours in the society of other men, at clubs.

But events at home and abroad, unforeseen but startling and stupendous, conspired to arrest this quiet social evolution, and to develop suddenly a new order of things, bringing to this people unprecedented problems which were to test their social and political institutions to the last degree. All this was to be considered in determining the type of education proper for this generation.

Among the movements with which the active energy evolved by the new order of things occupied itself was that to secure to woman the rights and privileges which she needs in order to qualify herself for the duties which modern life imposes upon her and which are her birthright. Among these privileges, and which should be held dear by all women, was that which President Andrew D. White prefers to call the further education of woman, and this watchword soon became a call for the exhibition of reforming zeal. It became the characteristic mark of the higher education reformer to recognize no "higher education" which should not be submitted to a board of college examiners and to loudly and sweepingly condemn the private schools for girls.

The true plan was asserted to be, to take the system of preparatory schools and colleges for men, just as they found them, and press the young girl up to that standard, laying upon her in some colleges additional manual labor, like waiting at table, washing dishes, and chamber-work, which, while it does not improve her in the art of housekeeping, takes time which might well be spent in cultivating the tones of the voice and refining the pronunciation of the English tongue, or be utilized in becoming acquainted with high standards of womanly refinement and grace, or in studying the lives of some perfect woman who has lived and left her record. It might perhaps be fairly urged that the colleges for women, while doing good work on strictly intellectual lines, neglect that liberal and social culture which distinguishes artistic work from the merely mechanical.

A very few years ago, the catalogues of all these colleges showed but ten names of pupils from New York, and very few from the other large towns, and since then this average has not been

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

raised. This might be held to show that there is a large demand for another and different system of liberal education which these colleges do not satisfy. While the course of instruction which they offer — identical with that in colleges for men, and graduating their students at twenty-two and twenty-five years of age—is worthy of encouragement and of praise nothing is more certain than that a majority of those girls who, as women, are sure to fill most important and influential positions throughout the land, will leave school at a much earlier age.

The conditions of modern life in this great and growing country are such, that the average American girl of more favored circumstances may step from the school-room, generally before she is twenty years old, into a station where the demands of domestic, social, charitable, and practical affairs leave her little time for further systematic study, and yet tax every resource of her store of knowledge and acquirement. If, then, she is confronted with subjects of which she is ignorant, but with which she should have acquired at least a speaking acquaintance while at school, she may justly reproach her teachers that they have adopted the mistaken policy of educating a girl who was to leave school at twenty on the plan requiring a continuance at school till at least twenty-three. Though many have doubted the possibility to provide for this active and proper demand, without compromise which is unfair to thoroughness, and which will not result in superficiality, I am justified in having adopted and for many years defended such a plan, by the highest authority among the educators of modern times.

The Rev. Henry Latham, Master of Trinity Hall, Cambridge, in his admirable work on the Action of Examinations, published in 1877, defines a "liberal education as that which concerns itself with the greatest good and highest cultivation of the pupil, valuing any accomplishment it may give, for the perceptions it opens out, for the new powers it confers, or for some other good it may do the pupil, and *not* as in technical education with reference to work produced."

This defines precisely the purpose and scope of the private school for girls, distinctly laid out by myself in 1864, viz., to afford to girls the best liberal education possible, consistent with certain limitations of age and the demands of their future lives—and from this purpose I have never swerved. Under this idea the regular course differentiates itself in the very beginning from that of the preparatory school, which is limited by the assumption of an advanced college course to follow.

I took the college system for men, and eliminated from it studies, the educational value of which were questioned by high authorities, and adapted it to the needs of women. Just now, when in these colleges woman has demonstrated that she can do in an examination just as much and as well as a young man, the great universities of England and America have discovered what a quarter of a century ago I believed to be the case, that much of this preparation is a waste of time and energy.

In the *Forum* of April last, is a paper by President Dwight, of Yale College, every word of which went to my heart. For twenty-six years the epithets of "fashionable," "superficial," have been applied to my system by the educational "Beckmessers" of the day, for exhibiting the very principles and views which he promulgates. President Dwight says, "If I am asked, therefore, what a boy who has the best chances ought to know at eighteen, my answer is—of course bearing in mind the limitations which my thought and the nature of the case suggests—he should know everything. This is the richness of the blessing which education has to give, and which it may give—the richest of all the blessings which our human life knows or can know, except that of the personal union with God. "Discipline gives the man the use of his powers. It almost creates them. It is of infinite importance, and is the fundamental necessity in all education.

"But enthusiasm sets the powers in motion, and fires the soul with the love of knowledge, and carries the man forward as on joyful wings." "Discipline was the gift of the old education—that which the fathers received and handed

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

down to their children." "The ordinary boy of our educated families lost, in my judgment, under the old system of school education, from two to three years out of the seven that were allotted for his earlier studies. He moved along his course by a hard road and a hilly road."

What is expected of woman whose nature feels every vibration of the greatly expanded moral medium about her in these latest years of the nineteenth century?

What education shall serve her under these varying and complex relations, under the burdens which one's duty to one's neighbor impose upon the American woman who stands upon the frontier of the twentieth century after Christ?

Science and relentless truth are already at work with her portrait. There shall be no mystery, no romance; no poetic glamour will have to be dispelled when her likeness shall be exhibited.

She will stand in the blaze of the electric light. The camera will be levelled upon her from every point of view; the stethoscope and thermometer will record every palpitation and degree of temperature of the heart; and the knife of the vivisector will reveal the source of the emotion which brings the blush to her cheek and the light to her eye.

I was told by Sir William Thomson, that Americans excel all nations in making instruments of precision; the American woman therefore will be submitted to every test until she shall cry, not in shame but in innocence, for the rocks and the hills to cover her—not from the wrath of God, but from the curiosity of man.

I have implicit faith in the American girl. The springs and impulses of her being are pure. It is expected of her that her education must enable her to fill any position which the civilization of the twentieth century may develop.

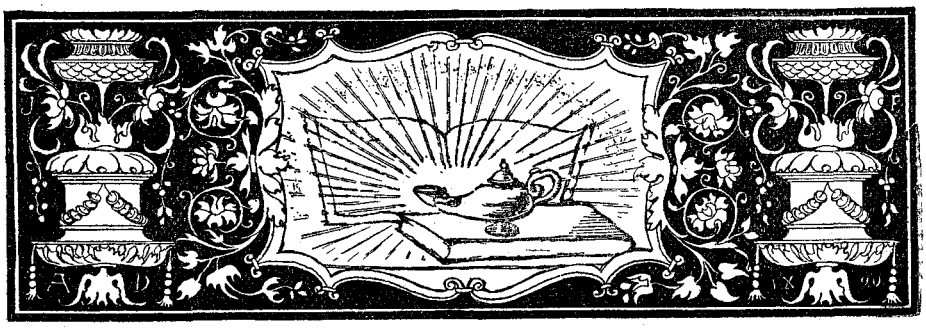
She should have all knowledge, which must appear in her conversation not as learning, but distilled in the alembic of her brain, it must wait upon her lips with the amber perfume of culture. Like the model lady described by Baldessare Castaglione in the sixteenth century—she must be of "noble bearing, but without affectation, graceful and virtuous, witty, and to excel in dancing and all festive games, yet be able to guide the house, to be well skilled in needlework, pious and learned in the writings of the great doctors, a discreet wife and a careful mother."

The Alma Mater of the American girl might feel satisfied that its measure of responsibility was filled, if (not only from a thousand homes in the city of New York, but from the Atlantic coast to the Golden Gate, from Puget Sound to the Rio Grande) by beautiful and sensible girls and young wives and mothers rejoicing in health and happiness, performing with intelligence and devotion their duties to family, society, and the Christian church, its name was spoken with reverence and affection. But its influence is not limited by this broad continent.

American women are wielding a great influence in foreign lands, either for better or for worse. Not only in England and France in places of responsibility, but near the throne in Germany, Italy, and other countries they fill positions of highest dignity. For many years there has been no time when some pupils of my own were not residing in honorable positions at foreign courts, or discharging with discretion and grace duties and obligations which have no place in the simpler social system of our Republic.

It has been my ambition that a private school should be justified in its claim as one of the chief agents in developing whatever is true and faithful in the home, whatever is pure and dignified in society, whatever is holy and exalted in religious life, whatever impels the people of all nations to bow with an instinct of respect to the name of an American woman.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



THE POINT OF VIEW.

A REPRESENTATIVE of that "contemporaneous posterity," with whose criticism we are benevolently supplied by foreign nations, has visited us during the past year in the person of M. Pierre de Coubertin—a Frenchman whom from intrinsic evidence it is certainly no error to describe as young, in spite of the gravity to be presumed from the title of his earlier work "L'Éducation en Angleterre," and of his selection by the French Minister of Public Instruction to visit for a special purpose "the educational institutions of the New World." To M. de Coubertin the New World is new indeed; "quel n'est pas votre étonnement," he says, "d'y trouver une civilisation établie, une société solidement assise, et surtout des traditions puissantes!" Yet he faces his surprises with unshaken confidence and the friendliest spirit, and does not allow them to interfere with the exercise of his critical acumen; and in the book, "Universités transatlantiques," in which he has fulfilled his task, if he has occasionally contributed a little to the gayety of the American teachers and students who may read it, he has also now and then furnished a text for thought more serious than he has himself worked out.

It must not be supposed from the very general title of M. de Coubertin's book that his mission was to report upon American education generally; but in the relation of that title to his actual subject there will lurk an unconscious irony in support of certain cynics, who will ask where the cisatlantic university is to be looked for if not in its gymnasium, playing-field, and boat-house? What M. de Coubertin came for was "to visit the universities and colleges, and study there the organization and working of the athletic associations founded by the youth" of the United States and Canada—in other words, to report upon school and college athletics, with the view of seeing whether, in what way, and how far it was well to inoculate the French student with the virus that has "taken" so fiercely in America.

It would be amusing to follow M. de Coubertin in his several visits of inspection: To Princeton, where (this being his first sight of a body of American students) he is struck by the lack of a race-type, and where he is put in charge of "le *football-captain*" ("un grand fort garçon, aux cheveux noirs frisés, l'air un peu brutal, revêtu d'une espèce de houppelande jaunâtre, sous laquelle on devine un déshabillé sans gêne"), who shows him much of which he generally approves, but of which he has less to say in detail than elsewhere; to Harvard, where he will none of Dr. Sargent and his anthropometry, speaking indeed very disrespectfully of his "normal man" and of the registers of measurements in the college gymnasium (which he says will probably take the place of family portraits in the future—so that a descendant may turn to one and say, "Voici mon arrière-grand-oncle! What a biceps he had!"); to Yale, where the rowing-tank filled him with admiration; to Cornell, Johns Hopkins, Amherst, Ann Arbor, and so on; to Wellesley, an important study surely; and even to the preparatory schools — Groton, Lawrence-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ville, the Berkeley, and the rest. But it is clearly impossible thus to follow his experiences; and what remains is to gather up a few of his general utterances and wonder whether they really represent the verdict of contemporary posterity after all, and wherein they are sound.

M. de Coubertin says: "It is certain that after the close of the war of secession the United States, having emerged intact from a terrible fratricidal struggle, gathered confidence in themselves; they had proved that they formed a solid nation, and the fear of letting themselves be tamed by the adoption of foreign ideas and customs gradually disappeared. Thus foot-ball, rowing, and, in a general way, all open-air exercises, came thronging into the New World; and at the same time teachers turned their eyes toward Great Britain to draw thence the principles of reorganization — principles which would have produced still better results by far if German ideas had not come athwart them to introduce disorder and sow seeds of evil. American education is a battle-field where German and English pedagogics contend for the mastery;" and the ideas of Arnold and the English public schools, he thinks, struggle with the rigid discipline and over-regulation of the German system—the latter helped by the fact that so many graduates of American colleges go to Germany to complete their studies. To be sure, he seems to apply this criticism to preparatory schools more than to the universities and colleges themselves; but he returns more than once to this idea, and especially in his own field constantly contrasts free athletic sports (jeux libres) with the systematic gymnastics to which he attributes a German origin—those which only recognize "mouvements d'ensemble, discipline rigide et réglementation perpétuelle."

His special *bête noire* seems to be the careful examination and measurement of individuals, as he saw it practised by Dr. Sargent at Harvard; and the regulation of their exercise toward local development. "It was the triumph of local gymnastics," he says, as he pictures with fine irony the efforts of a student to restore the equilibrium between his little fingers, or to regulate a variation of his left thigh, in his struggle to approach the "normal man." And the whole extent to which the systematizing and organizing of athletics are carried at Harvard seems to him pedantic and repellent: "Mais comme c'est réglementé, tout cela!" How it is all regulated! "These sports are in the hands of *directors*, who organize them despotically;" and *à propos* of the preparation of the "teams:"—"one would say, it was a racing-stable; that a breeder was turning over fine animals to the trainer." And more generally he finds that even into the "free sports," the games, etc., which have been adopted from England, "the Americans brought that excessive ardor which characterizes them, and exaggeration was the speedy outcome." In the training of representative "teams" the extent to which the gymnastic apparatus and facilities are often monopolized by them (surely an error of fact, this last), and the immense importance given to their action and victories, he sees serious dangers to the maintenance of a general, healthy, normal standard of athletics; and in his final letter to his chief he warns him against admitting these perils to any system of physical education that may be established in France.

M. de Coubertin gives us no opportunity to apply the proverb as to the wisdom of learning from an enemy, for his book is generally friendly, sometimes enthusiastic, always appreciative in spirit even when not remarkably profound. Good results will be hoped for from his mission by everyone who knows the past condition of French schools and colleges in this regard; and his analysis of some of the motes in our eyes is of interest enough to let us overlook any beam that may be in his own.

THERE is a proverb of Solomon's which prophesies financial wreck or ultimate misfortune of some sort to people who make gifts to the rich. Though not expressly stated, it is somehow implied that the proverb is intended not as warning to the rich themselves, who may doubtless exchange presents with impunity, but for persons whose incomes rank somewhere between "moderate circumstances" and destitution. That such persons should need to be warned not to spend their substance on the rich seems odd, but when Solomon was busied with precept he could usually be trusted

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

not to waste either words or wisdom. Poor people *are* constantly spending themselves upon the rich, not only because they like them, but often from an instinctive conviction that such expenditure is well invested. I wonder sometimes whether this is true.

To associate with the rich seems pleasant and profitable. They are apt to be agreeable and well informed, and it is good to play with them and enjoy the usufruct of all their pleasant apparatus; but, of course, you can neither hope nor wish to get anything for nothing. Of the cost of the practice, the expenditure of time still seems to be the item that is most serious. It takes a great deal of time to cultivate the rich successfully. If they are working people their time is so much more valuable than yours that when you visit with them it is apt to be your time that is sacrificed. If they are not working people it is worse yet. Their special outings, when they want your company, always come when you cannot get away from work except at some great sacrifice, which, under the stress of temptation, you are too apt to make. Their pleasuring is on so large a scale that you cannot make it fit your times or necessities. You can't go yachting for half a day, nor will fifty dollars take you far on the way to shoot big game in Manitoba. You simply cannot play with them when they play, because you cannot *reach;* and when they work you cannot play with them because their time then is worth so much a minute that you cannot bear to waste it. And you cannot play with them when you are working yourself and they are inactively at leisure, because, cheap as your time is, you can't spare it.

Charming and likeable as they are, it must be admitted that there is a superior convenience about associating with people who want to do about what we want to do at about the same time, and whose abilities to do what they wish approximate to ours. It is not so much a matter of persons as of times and means. You cannot make your opportunities concur with the opportunities of people whose incomes are ten times greater than yours. When you play together it is at a sacrifice, and one which *you* have to make. Solomon was right. To associate with very rich people involves sacrifices. You cannot be rich either without expense, and you may just as well give over trying. Count it, then, among the costs of a considerable income that in enlarging the range of your sports it inevitably contracts the circle of those who will find it profitable to share them.

It has happened to me within a year or two to look on at the partition of several considerable estates, and to observe in a general way what the heirs seemed to be doing with their money. They were an assorted lot of heirs, with such differences in tastes as people usually have, and I have been surprised at the similarity in their methods of primary expenditure. A reasonable outbreak in clothes was one of the early symptoms of those that came under my notice; followed in several cases by investments in horses, carriages, and hired men, in houses and domiciliary improvements, and less immediately by the purchase of increased leisure. Following the leisure came travel. Out of a score or so of these new heirs not less than a dozen reported in the early spring, without any general previous understanding, at an expensive and delightful watering-place in Florida. They have since gone to Europe with a unanimity which brought to some of them the embarrassment of finding themselves on the same steamer with co-heirs with whom those exasperating differences which are so apt to be incident to the distribution of property had left them on politely antagonistic terms.

It is an interesting deduction from the behavior of these heirs, that if you distribute a certain number of millions among a certain number of intelligent, adult Americans, you can forecast the general lines of their expenditure for a year or two ahead, and even mark upon the map the places at which they may be confidently expected to appear within a certain time. Of course your forecast will not be verified in all cases, but if you are reasonably intelligent about it the accordance between what you expect and what you observe will be close enough to give you a new idea about the smallness of the world, and the influence of circumstances and personal example on human action. You will find that people newly entrusted with about the same amount of money, in the same country, at

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

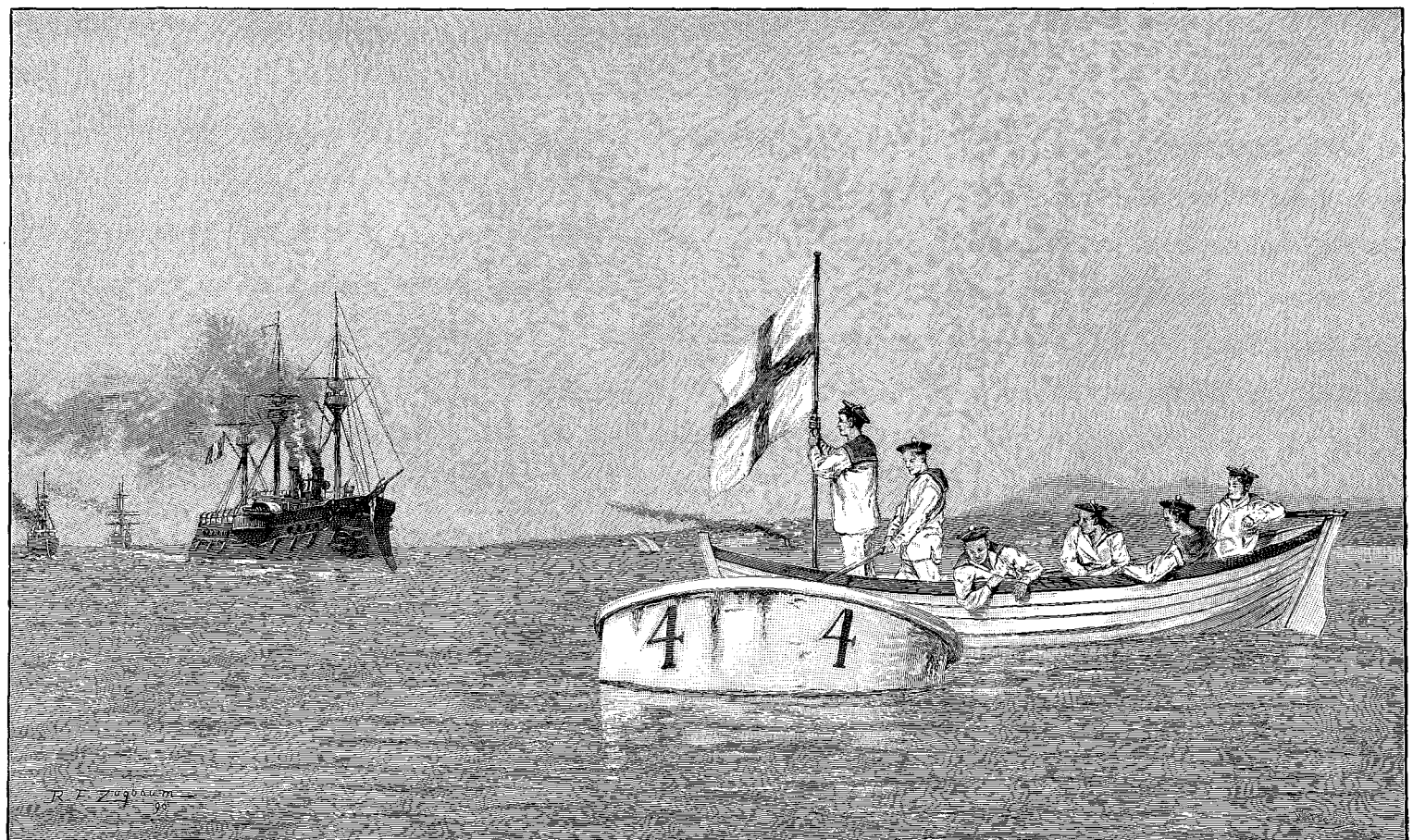
the same time, go through for a time about the same set of motions. But of course they get different degrees of enjoyment out of them. For anyone who can pay can go and do, but the capacity to enjoy is strictly personal. That is why, after heirs have had their money awhile, and tried the amusements that everyone is bound to try, they cease to fit your generalities. They find out presently what they like and what they do not enjoy, and then their individuality reasserts itself, and they go their several ways again with tastes and purposes modified indeed by money, but not obliterated by it.

Few of those who do not write are likely to be aware of the strange perplexities and despairs which sometimes assail the writer, which Henri Murger chronicles repeatedly in his immortal "Vie de Bohème." "Nothing is more terrible," he says, "than this solitary struggle between the stubborn artist and his rebellious art. . . . The sharpest human anguish, the deepest wounds in the heart's core cause no pain approaching that of those hours of impatience and of doubt, so frequent with all who are given over to the perilous employment of the imagination." Even the proudest and most self-reliant man has his day of trial, when he turns instinctively to a friend for help; and the author, whose laboring hours must of necessity be passed alone, feels the want of such counsel oftener than he is able to obtain it. As life goes on we grow naturally more and more absorbed in ourselves; our own interests and prejudices and convictions become barriers that are harder and harder to break down. The man who appeals to us discovers this, and seeks elsewhere for encouragement, or goes without it. Could we but learn to answer his appeal wisely, generously, and hopefully, his gain would be great, while ours would be greater still.

The late John Boyle O'Reilly, whose soul "is but a little way above our heads," was never found wanting when this friendly service was demanded of him. He had no petty jealousies to overcome, no envious anxieties for personal success to set aside. He gave himself freely and fully, hailing with delight the good in another's work as though it were his own. His sympathies were perfect, his expression of them was considerate to a rare degree. He listened eagerly and patiently, ever ready to speak the stimulating word of approval; or, if fault was to be found, finding it in a way that had no power to wound. His skill at detecting a flaw was unerring, but not content with marking down the error he would suggest one remedy after another, and never rest until the cure had been effected. "Your work rings true; but I wish you had more purpose," he said once. His own purpose, as many know, was always heroically high.

This is but one small view of a many-sided character that had the fire of genius in it. Yet the glimpse is significant and may afford opportunity for reflection, showing as it does how his influence worked good in younger writers. His intention, expressed a few hours before his sudden death, was to devote more time in the coming years than ever before to the higher forms of literature. In his loss there has been lost not only the product of his own mature mind, that would have gained him wider fame, but also all that he would unselfishly have aided other men to do.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



DRAWN BY R. F. ZOGBAUM.

SIGNALLING TO MOORINGS.

ENGRAVED BY WITTE.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED